LLKilns
hotkilns.com

KILN CATALOG

KILNS BUILT TO LAST

IMAGINE IF YOUR KILN LASTED 20 YEARS?

Kilns self destruct. Loading and unloading, heating and cooling, moving elements, acidic fumes from the ceramic process: all take their toll. That undestanding is the design philosophy behind L&L Kilns. We design for durability, performance, safety, and maintainability. We hope you will benefit by what we offer.

Patented Dyna-Glow Hard Ceramic Element Holders Make that Possible

HARD CERAMIC ELEMENT HOLDERS - KEY TO L&L'S DURABILITY

The smooth, hard surface of the inside ceramic channel allows the elements to expand and contract freely. No pins! This prevents catastrophic element failure. Elements do not droop out of broken firebrick channels. The dense ceramic DynaGlow holders extend element life because they do not insulate the hot elements from the kiln interior.

Stop worrying about loading your kiln! Load with confidence. You won't damage the fragile firebrick, touch dangling elements, or damage the protected thermocouples.
Clean L&L Kilns
Nonexperts can change elements in an L&L Kiln with no risk of brick damage. No pins!

ELEMENT HOLDERS MAKE YOUR L&L KILN EASY TO LOAD

Everyone eventually hits the side of their kiln when loading shelves and work. L&L kiln owners don't sweat this because the hard holders take the beating (unlike most kilns where the fragile brick forms the element channel). Also, for professionals who know they will change elements, it will take minutes not hours with hard ceramic holders. You will not break brick, push pins into broken brick, or crimp element connectors. Anyone can do it with a screwdriver and a wrench.

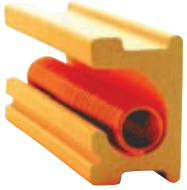
Typical Kilns

Moving elements can break fragile firebrick - THIS IS NOT NORMAL - not if you use an L&L Kiln.

HARD CERAMIC ELEMENT HOLDERS PREVENT RIM DAMAGE

Hard ceramic holders support the brick inside the element grooves, creating a strong structure and helping to prevent damage to the top rim surface of your kiln.

HARD CERAMIC ELEMENT HOLDERS ENHANCE UNIFORMITY



L&L kilns naturally fire evenly top to bottom. The whole Dyna-Glow ceramic element holder glows with radiant heat. (**hotkilns.com/zone** for test data comparing an Easy-Fire e23T to a competitive model).

DURABILITY

PROTECTED THERMOCOUPLES

L&L thermocouples are shielded from corrosion by a ceramic protection tube. We use the finest "special limit" aerospace-grade heavy-gauge thermocouple wire. The protection tube prevents black dust from the thermocouple end from discolouring your work. **(hotkilns.com/tc-protection)**

CERAMIC ELEMENT TERMINALS

Ceramic element terminals make element changes easy. **(hotkilns.com/ceramic-terminal)**

SOLID PEEP PLUGS

Solid straight ceramic peephole plugs are strong and will not slip out like tapered, fragile, slip-cast plugs. **(hotkilns.com/peephole-plugs)**

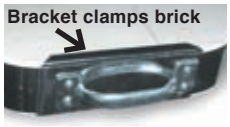
CORROSION RESISTANCE

Stainless steel, aluminized, and galvanealed steel are used where needed. **(hotkilns.com/corrosion-resistant)**

PROPRIETARY BRICK COATING

L&L's proprietary reflective brick coating protects the surface of the firebrick and keeps dusting down inside the kiln. **(hotkilns.com/reflective-coating)**

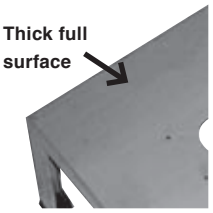
LID BRICK IS SECURED WITH CLIPS



Stainless "U" brackets secure lids - not friction. **(hotkilns.com/lid-clips)**

FULL-SUPPORT STANDS

Full-support 14 gauge aluminized steel stand is stronger than hollow frame stands and provides important support in the center of the bottom. **(hotkilns.com/full-stand)**



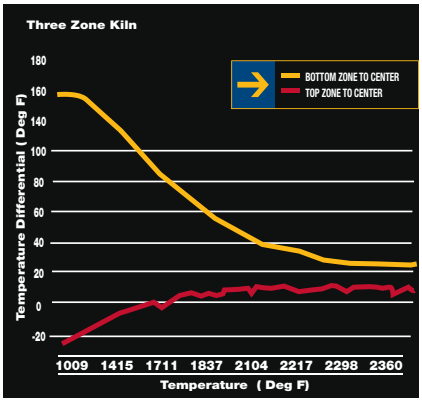
PERFORMANCE

DYNATROL IS EASY AND POWERFUL

DynaTrol with 4 Easy-Fire programs (Slow Bisque, Fast Bisque, Slow Glaze, Fast Glaze), 6 custom programs, PreHeat, Delay, Program, Segment Review, and Diagnostics. **(hotkilns.com/dynatrol)**

DYNAMIC ZONE CONTROL

The DynaTrol separately measures temperatures in the bottom, middle and top of the kiln and automatically adjusts the heat output of three zones during the entire firing. Kiln temperatures are automatically evened out to within 1/2 cone or better top to bottom. Zone control



automatically compensates for many loading issues and element changes over time. Even on kilns where we use graded elements, L&L kilns are fundimentally uniform because the element holders radiate the heat more evenly. **(hotkilns.com/zone)**

"EASY-OPEN, EASY-LOAD" LID OPENS WIDE FOR LOADING

The whole kiln supports the lid (not just one section). Our positive safety pin secures the lid safely. No support bars (like other kilns) get in the way of loading when the lid is fully tilted back. **(hotkilns.com/spring-hinge)**

SAFETY

UL499 LISTING

Most L&L kilns are c-MET-us listed to UL499 standards. See each kiln series for details. **(hotkilns.com/ul499)**

SAFE MATERIALS

No asbestos, mercury, lead, or other hazardous materials are used in L&L kilns.

SAFETY LATCHES ON LIDS

All lids and lifting devices include a safety latching system.

MAINTAINABILITY

L&L KILNS ARE EASY TO TROUBLESHOOT

Open up any L&L kiln control panel and see how easy it is to check amps, element resistance, and voltage. No other kiln can be serviced as quickly, easily, or inexpensively as an L&L kiln.

SECTIONAL CONSTRUCTION MAKES REPAIR WORK EASY

All top-loading L&L kilns are sectional. Even the large 35 cubic foot standard DaVinci kiln is easy to move, set up, and repair.

THREE-YEAR WARRANTY

See **hotkilns.com/warranty.** Free email, web and phone support forever.

IN-DEPTH SUPPORT

One customer said: "I am truly impressed with your website, it is more than informative and your products are well designed. The fact that all the information, including repair manuals, are listed, speaks well of your dedication to customer service." Our website has thousands of pages of technical help - all easily searchable - plus we provide expert support with phone and email.

VISUAL INSTRUCTIONS

No one has a better or more complete instruction manual. Our visual instructions address the needs of the artist, the installer, and the repair person. You get a fully illustrated operation and service manual. Various instructional videos are available. **(hotkilns.com/videos)**

EASY-FIRE KILNS

L&L's Flagship Kilns

This is the classic L&L pottery kiln used by most of our customers.

- DynaTrol Dynamic Three Zone Control
- 4 Easy-Fire plus 6 Custom Programs
- Hard Ceramic Element Holders
- Cone 10 • 2350°F • 1290°C (except for single phase e28T-3 models)
- Choice of 2-1/2" or 3" Brick
- Full-View Solid Peephole Plugs
- Stainless Spring Hinge wide open easy loading
- Heavy-Duty 14 Gauge Aluminized Stand
- Fold Down Panel for Easy Maintenance
- c-MET-us listed to UL499 Standards

Features & Benefits

CONSTRUCTION

Sectional: Made of 9" high sections with a reversible bottom and a spring-hinged top. The case is stainless steel wrapped around 2-1/2" or 3" of K23 highly insulating firebrick with 3 adjusting screw clamps per section. Easy to move:**hotkilns.com/ assemble-easy-fire**

Brushed stainless steel spring hinge (on 23" & 28" diameter models) makes opening easy while still allowing lid to be supported while providing an unobstructed opening for easy loading. Safety pin prevents lid from closing while loading.

Firebrick is coated with a proprietary hardening reflective coating.

Ceramic element terminals make element changes easy.

A heavy 14 gauge full support solid stand with multiple bends for strength includes feet protectors.

Full-view solid ceramic peephole plugs are 1" diameter non-tapered with heat-locked head. There is one for each section.

ELEMENT HOLDER SYSTEM

Patented hard ceramic element holders protect brick and elements from wear and loading damage. No pins! Proprietary all-ceramic element connection block and hard holders makes changing elements easy.

DYNATROL ZONE CONTROL

DynaTrol with 4 Easy-Fire programs (Slow Bisque, Fast Bisque, Slow Glaze, Fast Glaze), 6 Vary-Fire custom programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Zone control with 2 or 3 zones with separate thermocouples. Type K 8 gauge thermocouple with ceramic protection tubes.

PIGGY-BACKED COOL-FIRE CONTROL PANEL

All controls and components are in a separate control panel that is piggy-backed on top of the element connection box. Both boxes are hinged and open and remove easily. A layer of insulation plus the separate control box keep the controls and relays cool. Power wires are oversized to run cool. On/off switch and control fuse included.

INSTRUCTIONS AND SUPPORT

Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. (**hotkilns.com/videos**)

Limited 3 year warranty. (**hotkilns.com/warranty**)

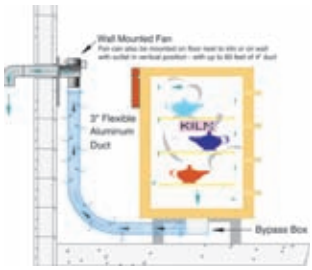
You can view all features of L&L Kilns at **hotkilns.com/features**

Options

FURNITURE KIT

Includes Cone 11 full shelves and half shelves as listed below plus a square post kit which includes six each 1/2", 1", 2", 4", 6" and 8" high 1-1/2" square cordierite posts plus heat-resistant gloves and 1 lb of cone 10 kiln wash. **[Prices below]**

POWERFUL VENT-SURE DOWNDRAFT KILN VENT



Vent-Sure 130 CFM downdraft vent pulls air down to bottom of kiln to improve temperature uniformity and vent corrosive fumes. Bypass collection box mounted on kiln allows adjustment of venting. Fan motor, mounted away from the kilns, stays cool and no vibration transmitted to the kiln. **[$465]**

CONTROL OPTIONS

Type S platinum thermocouples. [$225 each]
Pyrocil metallic sheathed thermocouples. [$25 each]
KISS Computer Software: For monitoring and controlling the kiln remotely. **[$575]**

ELEMENT OPTIONS

Quad Element Option: Four rows of elements for each 9" kiln section. Maximum element life for constant high-firing. **[Prices below]**

APM Elements. [Custom pricing]

VOLTAGE OPTIONS

Order 240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. 480 volts is not available. **[No Charge for any voltage options]**

→ NEW FOR 2015 ←

SINGLE-ZONE EASY-FIRE KILNS *WITH REDUCED PRICES*

PRICE COMPETITIVE WITH OTHER KILNS - BUT WITH FAR MORE VALUE-ADDED FEATURES

Get all of the features of Easy-Fire kilns but without zone-control. These models use graded elements to produce even firing. All other features, including the Dyna-Trol, hard element holders, protected thermocouple, solid stand, solid full-view peephole plugs, Easy-Lift, Easy-Load spring-loaded stainless steel hinge system, c-MET-us listing, three-year warranty, etc. are all the same as on the Easy-Fire kiln. **[Upgrade to a zone control system anytime with an installation kit for only $185 for three zone kilns (27" high) or $150 for two zone kilns (18" high).]**

Model No.	Kiln Price	Furn Kit	Quad Elem	Brick Thick	Inside Diam	Inside Height	Cubic Feet
e18S-G	$1685	$300	$175	2.5"	17.5"	18"	2.6
e18S-3-G	$1745	$300	$175	3"	16.5"	18"	2.5
e18T-G	$2235	$340	$250	2.5"	17.5"	27"	3.9
e18T-3-G	$2315	$340	$250	3"	16.5"	27"	3.7
e23S-G	$2295	$340	$200	2.5"	23.5"	18"	4.7
e23S-3-G	$2395	$340	$200	3"	22.5"	18"	4.4
e23T-G*	$2845	$420	$300	2.5"	23.5"	27"	7.0
e23T-3-G*	$2925	$420	$300	3"	22.5"	27"	6.7
e28S-3-G	$2845	$530	$275	3"	28"	18"	6.8
e28T-3-G*	$3365	$645	$400	3"	28"	27"	10.2

Specifications: All electrical and cone ratings, dimensions, plug configurations, and UL and CE standards are the same as on standard Easy-Fire kilns. *e23T-G, e23T-3-G & e28T-3-G available April 1, 2015. All others available July 1, 2015.

Model No.	Kiln Price	Furn Kit	Quad Elem	No. Shelves F=full, H=half	Brick Thick	Inside Diam	Inside Height	Cubic Feet	Exterior Dimensions (in)	240/1 KW~Amp~Fuse	240/3 KW~Amp~Fuse	208/1 KW~Amp~Fuse	208/3 KW~Amp~Fuse	Lbs Kiln	Lbs w/Kit
e18S	$1835	$310	$180	15.5" (1F, 4H)	2.5"	17.5"	18"	2.6	29W x 31H x 30D	5.7~23.9~30	5.7~18.9~30	5.0~23.9~30	5.0~18.9~30	190	245
e18S-3	$1895	$310	$180	15" (1F, 4H)	3"	16.5"	18"	2.5	29W x 32H x 30D	5.7~23.9~30	5.7~18.9~30	5.0~23.9~30	5.0~18.9~30	220	255
e18T	$2420	$350	$260	15.5" (2F, 4H)	2.5"	17.5"	27"	3.9	29W x 40H x 30D	8.4~35.0~50	8.4~20.2~30	8.4~40.4~60	8.4~23.3~30	230	305
e18T-3	$2500	$350	$260	15" (2F, 4H)	3"	16.5"	27"	3.7	29W x 41H x 30D	8.4~35.0~50	8.4~20.2~30	8.4~40.4~60	8.4~23.3~30	255	325
e23S	$2445	$350	$210	21" (1F, 4H)	2.5"	23.5"	18"	4.7	31W x 32H x 42D	9.5~39.4~50	9.5~31.2~40	8.3~40.0~50	8.3~31.6~40	265	350
e23S-3	$2545	$350	$210	20" (1F, 4H)	3"	22.5"	18"	4.4	31W x 33H x 42D	9.5~39.4~50	9.5~31.2~40	8.3~40.0~50	8.3~31.6~40	305	375
e23T	$3030	$435	$310	21" (2F, 4H)	2.5"	23.5"	27"	7.0	31W x 41H x 42D	11.5~48.0~60	11.5~27.7~40	10.0~48.0~60	11.0~30.5~40	325	420
e23T-3	$3110	$435	$310	20" (2F, 4H)	3"	22.5"	27"	6.7	31W x 42H x 42D	11.5~48.0~60	11.5~27.7~40	10.0~48.0~60	11.0~30.5~40	360	455
e28S-3	$2995	$545	$285	25-1/2" (6H)	3"	28"	18"	6.8	37W x 33H x 48D	11.5~47.9~60	11.5~37.9~50	10.0~48.0~60	10.0~38.0~50	370	470
e28T-3	$3550	$665	$415	25-1/2" (8H)	3"	28"	27"	10.2	37W x 42H x 48D	11.5~48.0~60	16.6~40.0~50	10.0~48.0~60	14.3~39.8~50	460	565

Cone Rating: All models are rated to Cone 10 except the single phase e28T-3 which is rated to Cone 8 at 240V/1 Phase, Cone 5 at 208V/1 Phase, but Cone 10 for any 3 phase kiln. If planning continuous Cone 6 firings on a 10 cubic foot single phase kiln we recommend the eQuad-Pro eQ2827-3 (page 7) or the Jupiter JD2927-3 (page 8) (both have more KW than the e28T-3 in their single phase versions).

Plugs on US Models only: 6-50 on single phase and 15-50 on three phase.

UL Listing: c-MET-us listed to UL499 standards. **CE Listing:** CE Listed models are available.

More: See Easy-Fire Specification Sheets at **hotkilns.com/spec-easy-fire** for shipping dimensions, electrical ratings, fuse and wire sizes.

SCHOOL-MASTER

Made For Schools

5-YEAR WARRANTY

For busy school teachers who want a simple control.

Features & Benefits

- ***SPECIAL FIVE-YEAR LIMITED WARRANTY (hotkilns.com/five-year-warranty)***
- **One-Touch™ Intuitive Kiln Control**

The One-Touch™ Control is designed for busy school teachers - One touch and you are ready to fire the bisque and glaze programs typically used in schools. (It is also easy to adjust simple parameters like cone, delay, hold, heat-up and cool-down rates). You can even create four custom ramp/hold programs. **hotkilns.com/one-touch**

- **Single zone with graded elements**
- **Cone 6 • 2230°F • 1220°C (except for 208 volt single phase SM28T-3 model)**
- **Includes all other features of the Easy-Fire Kiln Series including sectional construction, Piggy-backed Cool-fire panel, solid peephole plugs, full support stand, ceramic terminals, reflective brick coating and "Easy-Lift, Easy-Load" stainless steel spring hinge system with full-support when door is up and tilted back**

FURNITURE KIT

Includes Cone 11 full shelves and half shelves as listed below plus a square post kit which includes six each 1/2", 1", 2", 4", 6" and 8" high 1-1/2" square cordierite posts plus heat-resistant gloves and 1 lb of cone 10 kiln wash. **[Prices below]**

POWERFUL VENT-SURE DOWNDRAFT KILN VENT

Vent-Sure 130 CFM downdraft vent. See page 17. **[$465]**

VOLTAGE OPTIONS

Order 240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. 480 volts is not available. **[No Charge for any voltage options]**

Model No.	Kiln Price	Furn Kit	No. of Shelves F=full, H=half	Brick Thick	Inside Diam	Inside Height	Cubic Feet	Exterior Dimensions	240/1 KW~Amp~Fuse	240/3 KW~Amp~Fuse	208/1 KW~Amp~Fuse	208/3 KW~Amp~Fuse	Lbs Kiln	Lbs w/Kit
SM23T	$2930	$435	21" (2F, 4H)	2.5"	23.5"	27"	7.0	31W x 41H x 42D	11.5~48.0~60	11.5~27.7~40	10.0~48.0~60	11.0~30.5~40	325	420
SM23T-3	$3010	$435	20" (2F, 4H)	3"	22.5"	27"	6.7	31W x 42H x 42D	11.5~48.0~60	11.5~27.7~40	10.0~48.0~60	11.0~30.5~40	360	455
SM28T-3	$3450	$665	25.5" (8H)	3"	28"	27"	10.2	37W x 42H x 48D	11.5~48.0~60	16.6~40.0~50	10.0~48.0~60	14.3~39.8~50	460	565

Cone Rating: All models rated for Cone 6 except for the single phase 208 volt SM28T-3, which is rated for Cone 5. If planning continuous Cone 6 firings on a 10 cubic foot single phase kiln we recommend the eQuad-Pro eQ2827-3 (page 7) or the Jupiter JD2927-3 (page 8) because they have more power.

Plugs on US Models only: 6-50 on single phase and 15-50 on three phase.

UL Listing: c-MET-us listed to UL499 standards. **CE Listing:** CE Listed models are available.

More: See **hotkilns.com/spec-school-master** for shipping dimensions, electrical ratings, fuse and wire sizes.

eQUAD-PRO KILNS

Super-Duty High Production Kilns

The eQuad-Pro sets a new standard in production kilns.

Not UL499 listed

Features & Benefits

- **Cone 10 • 2350°F • 1290°C - with extra power with branch fusing for high production and dense loads**
- **Quad element system (fours rows of super heavy gauge elements per 9" high section)**
- **3" K23 brick**
- **DynaTrol with Dynamic Zone Control (3 Zones)**
- **Piggy-back cool-fire control panel like Easy-Fire**
- **Hard ceramic element holders**
- **Type K 8 GA thermocouples with ceramic protection tubes**
- **Full support 14 gauge aluminized steel stand**
- **Solid peephole plugs with full 1" view**
- **Proprietary reflective brick coating that protects brick and minimizes dusting**
- **"Easy-Lift, Easy-Load" stainless steel spring hinge system with full-support when door is up and tilted back (there are no support bars to get in the way of loading)**
- **Three-year Limited Warranty**

Options

FURNITURE KIT

Cone 11 full shelves and half shelves as listed below plus a square post kit, heat-resistant gloves and 1 lb of cone 10 kiln wash. **[Prices below]**

POWERFUL VENT-SURE DOWNDRAFT KILN VENT

Vent-Sure 130 CFM downdraft vent. See page 17. **[$465]**

CONTROL OPTIONS

Type S platinum thermocouples. [$225 each]

Pyrocil metallic sheathed thermocouples. [$25 each]

KISS Computer Software for monitoring and controlling the kiln remotely. **[$575]**

VOLTAGE OPTIONS

Order 240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. 480 volts is not available. **[No Charge for any voltage options]**

QUAD ELEMENT SYSTEM INCLUDED

This photograph shows the inside of an eQuad-Pro while firing. Notice how the element holders glow and disperse the radiant heat. The large diameter elements (both of the wire gauge and outside diameter of the element coil), coupled with the unique glowing feature of the hard dense ceramic element holders make these elements last a very long time. **(hotkilns.com/quad) Optional APM Elements** [Custom pricing]

Model No.	Kiln Price	Furn Kit	No. of Shelves F=full, H=half	Inside Diam	Inside Height	Cubic Feet	Exterior Dimensions	240/1 KW~Amp~Fuse	240/3 KW~Amp~Fuse	208/1 KW~Amp~Fuse	208/3 KW~Amp~Fuse	Lbs Kiln	Lbs w/Kit
eQ2327-3	$3835	$435	20" (2F, 4H)	22.5"	27"	6.7	31W x 42H x 42D	13.4~56.0~70	13.4~32.4~50	11.7~56.0~70	11.7~32.4~50	365	485
eQ2827-3	$4430	$665	25.5" (8H)	28"	27"	10.2	37W x 42H x 48D	15.0~62.3~80	15.0~36.0~50	15.0~71.9~90	15.0~41.5~60	480	585
eQ2836-3	$5195	$790	25.5" (10H)	28"	36"	13.6	37W x 51H x 48D	19.0~79.2~100	19.0~51.5~70	19.0~91.3~125*	19.0~59.4~80	595	725

***Note**: Special model eQ2836-X-208-1P is available with 16.6 KW, 208 Volt/1 Phase, 80 amps for a 100 amp fuse.

More: See **hotkilns.com/spec-equad-pro** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. All models are direct wired with no cords. For controls see **hotkilns.com/dynatrol** and **hotkilns.com/zone.**

Listings: These kilns are not UL499 Listed

JUPITER KILNS

Easy To Take Apart

Jupiter kilns are easy-to stack and disassemble because of the plug-in sections.

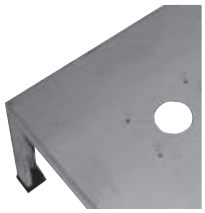
- Sections can be added later or removed for smaller loads
- DynaTrol with Dynamic Zone Control (2 zones in 18” high models, 3 zone in all other models)
- Hard Ceramic Element Holders
- Most Models are Cone 10 • 2350°F • 1290°C (See grid)
- Choice of 2-1/2” or 3” Brick
- Full-View Solid Peephole Plugs
- Stainless “Easy-Lift, Easy-Load” Spring Hinge
- Wide Open Easy Loading
- Heavy-Duty 14 Gauge Aluminized Stand
- Removable Panel for Easy Maintenance
- c-MET-us listed to UL499 Standards

Features and Benefits

CONSTRUCTION

Sectional: Made of 9” high sections with a reversible bottom and a spring-hinged top (23” & 28” models). The case is stainless steel wrapped around 2-1/2” or 3” of K23 highly insulating firebrick with 3 adjusting screw clamps per section.

Brushed stainless steel spring hinge (on 23” & 28” diameter models) makes opening easy while still allowing lid to be supported while providing an unobstructed opening for easy loading. Safety pin prevents lid from closing while loading.



Ceramic element terminals make element changes easy.

A heavy 14 gauge full support solid stand with multiple bends for strength includes feet protectors.

Firebrick is coated with a proprietary hardening reflective coating.

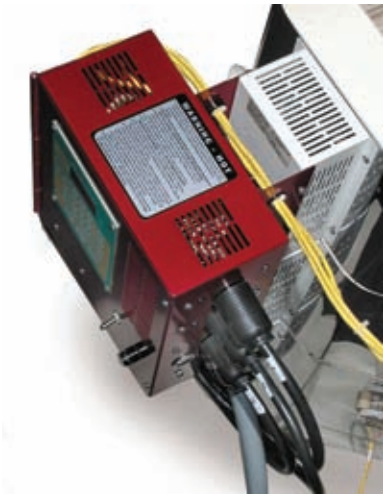
Full-view solid ceramic peephole plugs are 1” diameter non-tapered with heat-locked head. There is one for each section.

ELEMENT HOLDER SYSTEM

Patented hard ceramic element holders protect brick and elements from wear and loading damage. No pins! Proprietary all-ceramic element connection block and hard holders makes changing elements easy.

DYNAMIC ZONE CONTROL

DynaTrol with 4 Easy-Fire programs (Slow Bisque, Fast Bisque, Slow Glaze, Fast Glaze), 6 Vary-Fire custom programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Zone control with 2 or 3 zones with separate thermocouples. Type K 8 gauge with ceramic protection tubes.



SEPARATE PLUG-IN CONTROL PANEL

The Jupiter control panel is separate from the kiln. Keeps controls and relays cool. All sections plug into it. Hinged and removable for easy maintenance. On/off switch and control fuse included.

INSTRUCTIONS AND SUPPORT

Complete visual instructions with control reference, process information, assembly, troublshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Limited 3 year warranty. **(hotkilns.com/warranty)**

You can view all features of L&L Kilns at **hotkilns.com/features**

Options

FURNITURE KIT

Includes Cone 11 full shelves and half shelves as listed below plus a post kit which includes six each 1/2", 1", 2", 4", 6" and 8" high 1-1/2" square cordierite posts plus heat-resistant gloves and 1 lb of cone 10 kiln wash. **[Prices below]**

POWERFUL VENT-SURE DOWNDRAFT KILN VENT

Vent-Sure 130 CFM downdraft vent. See page 17. **[$465]**

CONTROL OPTIONS

Type S platinum thermocouples [$225 each]

Pyrocil metallic sheathed thermocouples [$25 each]

KISS Computer Software for monitoring and controlling the kiln remotely. **[$575]**

High Limit Back Up Digital Control (latching relay back up control system). **[$575]**

Back Up Contactors (actuated by the High Limit Back Up Digital Control). **[$100 plus $50 per kiln section]**

120 volt power supply with EMI electrical noise filter for the automatic control. **[$190]**

ELEMENT OPTIONS

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum element life for constant high-firing. **[Prices below]**

Apm Elements [Custom pricing]

VOLTAGE OPTIONS

240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. 480 volts available on JD2900 Series. **[No Charge except for 480 volts]**

480 volts/3 phase. (needs NEMA1 panel for MET-us listing) (sections hard wired to power box). **[$670]**

NEMA 1 Control box for industrial use (MET-us listed with this extra option for 480 volts). **[$670]**

PULL-APART OPTION FOR SCULPTURE

"Pull-Apart" Option for sculpture. Includes floor mount stand for control panel, lift off lid with extra handles but no hinge. This option allows the entire kiln to be dismantled to make it easy to load large sculptural pieces. The kiln sections are unplugged and then taken off one at a time. **(hotkilns.com/pull-apart-kilns)**

[There is no charge for this option. However, If you want the "Easy-Lift, Easy-Load" spring hinge with it there is a $210 extra charge.]

Model No.	Kiln Price	Powered Bottom	Furn Kit	Quad Elem	No. of Shelves F=full, H=half	Inside Diam	Inside Height	Cubic Feet	Cone Rating	240/1 KW~Amp~Fuse	240/3 KW~Amp~Fuse	208/1 KW~Amp~Fuse	208/3 KW~Amp~Fuse	Lbs Kiln	Lbs w/Kit
JD JUPITER KILNS WITH 2.5" BRICK															
JD18	$1850	n/a	$310	$180	15.5" (1F, 4H)	17.5"	18"	2.6	10	5.5~23.0~30	5.5~19.9~30	5.5~26.5~30	5.5~23.0~30	200	245
JD18X	$2570	n/a	$350	$260	15.5" (2F, 4H)	17.5"	27"	3.9	10	8.3~34.5~50	8.3~19.9~30	8.3~39.8~50	8.3~23.0~30	245	295
JD23V	$2435	$460	$350	$205	21" (1F, 4H)	23.5"	18"	4.7	5	7.0~29.3~40	7.0~25.4~40	6.1~29.3~40	6.1~25.4~40	275	350
JD230V	$3025	$460	$435	$310	21" (2F, 4H)	23.5"	27"	7.0	10	10.6~44.0~60	10.6~25.4~40	9.1~44.0~60	9.1~25.4~40	330	425
JD236V	$3640	$460	$505	$410	21" (3F, 4H)	23.5"	36"	9.4	10	14.1~58.6~80	14.1~38.1~50	12.2~58.6~80	12.2~38.1~50	360	455
JD245V	$4260	$460	$585	$515	21" (4F, 4H)	23.5"	45"	11.8	10	17.6~73.3~100	17.6~50.8~70	15.2~73.3~100	15.2~50.8~70	445	560
JD JUPITER KILNS WITH 3" BRICK															
JD18-3	$1900	n/a	$310	$180	15" (1F, 4H)	16.5"	18"	2.5	10	5.5~23.0~30	5.5~19.9~30	5.5~26.5~30	5.5~23.0~30	230	280
JD18X-3	$2680	n/a	$350	$260	15" (2F, 4H)	16.5"	27"	3.7	10	8.3~34.5~50	8.3~19.9~30	8.3~39.8~50	8,3~23.0~30	270	320
JD23V-3	$2570	$460	$350	$205	20" (1F, 4H)	22.5"	18"	4.5	5	7.0~29.3~40	7.0~25.4~40	6.1~29.3~40	6.1~25.4~40	315	340
JD230V-3	$3155	$460	$435	$310	20" (2F, 4H)	22.5"	27"	6.7	10	10.6~44.0~60	10.6~25.4~40	9.1~44.0~60	9.1~25.4~40	385	470
JD236V-3	$3805	$460	$505	$410	20" (3F, 4H)	22.5"	36"	8.9	10	14.1~58.6~80	14.1~38.1~50	12.2~58.6~80	12.2~38.1~50	460	545
JD245V-3	$4495	$460	$585	$515	20" (4F, 4H)	22.5"	45"	11.1	10	17.6~73.3~100	17.6~50.8~70	15.2~73.3~100	15.2~50.8~70	540	650
JD2918-3	$3540	$590	$545	$260	25.5" (6H)	28"	18"	6.8	5	9.1~38.0~50	9.1~32.9~50	8.3~40.0~50	8.3~34.6~50	380	480
JD2927-3	$4425	$590	$665	$360	25.5" (8H)	28"	27"	10.2	10	13.7~57.0~80	13.7~32.9~50	12.5~60.0~80	12.5~34.6~50	450	575
JD2936-3	$5625	$590	$790	$490	25.5" (10H)	28"	36"	13.6	10	18.2~76.0~100	18.2~49.3~70	16.6~80.0~100	16.6~52.0~70	565	715
JD2945-3	$6670	$590	$910	$590	25.5" (12H)	28"	45"	17.0	10	22.8~95.0~125	22.8~65.8~90	20.8~100.0~125	20.8~69.3~90	645	820

Note About EZ Models: All the J2300 series are available with higher watts "EZ" elements (the same elements used in the e23T kilns) at no extra charge. See web and specification sheet for details.

Cone Rating: See above chart. **More**: See various Jupiter Automatic specification sheets at **hotkilns.com/spec-jupiter-auto** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. **Power Hookup:** Plugs on kilns that have less than 48 amps, otherwise direct wired. For controls see **hotkilns.com/dynatrol** and **hotkilns.com/zone.**

DAVINCI KILNS

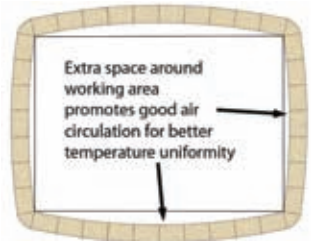
Square & Rectangular Top-Loading Kilns

This is L&L's classic production kiln. Also great for Universities and high volume High School programs.

- DynaTrol with Dynamic Zone Control (2 zones in 18" high models, 3 zone in all other models)
- Cone 10 • 2350°F • 1290°C (All models)
- Counterbalanced Lid with springs inside of tubes
- Safety Latches for Lid
- Welded angle-iron powder-coated stand and hinge
- 3" brick with all brick construction (including lid)
- Strong arched sides with extra space added to interior dimensions for good air circulation
- Three elements per 9" section
- Ceramic Element Terminals
- Hard ceramic element holders
- Plug in kiln sections
- Floor mounted control panel (except for X2300 series)
- c-MET-us listed to UL499 Standards

Features & Benefits

CONSTRUCTION



Sectional: Made of 9" high sections with a reversible bottom. The case is stainless steel wrapped around 3" of K23 highly insulating firebrick with 3 adjusting screw clamps per section.

Strong arched sides with extra space added to interior dimensions for good air circulation.

Spring-hinged counterbalanced top. Safety latch prevents lid from closing while loading. Design allows extra sections to be added and adjusted.

Firebrick is coated with a proprietary hardening reflective coating.

Full-view solid ceramic peephole plugs are 1" diameter non-tapered with heat-locked head. There is one for each section.

ELEMENT HOLDER SYSTEM

Patented hard ceramic element holders protect brick and elements from wear and loading damage. No pins! Proprietary all-ceramic element connection block and hard holders makes changing elements easy.

DYNAMIC ZONE CONTROL

DynaTrol with 4 Easy-Fire programs (Slow Bisque, Fast Bisque, Slow Glaze, Fast Glaze), 6 Vary-Fire custom programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Zone control with 2 or 3 zones with separate thermocouples. Type K 8 gauge with ceramic protection tubes.

FLOOR STANDING PANEL

All controls and components are mounted in a separate control box mounted on the floor away from the kiln. Branch fused and neatly layed out circuits. On/off switch and control fuse included.

INSTRUCTIONS AND SUPPORT

Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Limited 3 year warranty. **(hotkilns.com/warranty)**

You can view all features of L&L Kilns at **hotkilns.com/features**

Options

FURNITURE KIT

Includes Cone 11 shelves as listed below plus one to three post kits which includes six each 1/2", 1", 2", 4", 6" and 8" high 1-1/2" square cordierite posts plus heat-resistant gloves and 1 lb of cone 10 kiln wash. **[Prices below]**

POWERFUL VENT-SURE DOWNDRAFT KILN VENT

Vent-Sure 130 CFM downdraft vent. See page 17. **[$465]**

CONTROL OPTIONS

Type S platinum thermocouples [$225 each]

Pyrocil metallic sheathed thermocouples [$25 each]

KISS Computer Software. For monitoring and controlling the kiln remotely. **[$575]**

High Limit Back Up Digital Control (latching relay back up control system). **[$575]**

Back Up Contactors (actuated by the High Limit Back Up Digital Control). **[$200 plus $75 per kiln section]**

120 volt power supply with EMI electrical noise filter for the automatic control. **[$190]**

ELEMENT OPTIONS

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum element life for constant high-firing. **[Prices below]**

Apm Elements [Custom pricing]

VOLTAGE & POWER OPTIONS

XB and TB elements, which have a higher KW rating, are available on the 27", 36" and 45" high DaVinci kilns. **[See High Power below]**

240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. **[No Charge except for 480 volts]**

480 volts/3 phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box). **[$670]**

NEMA 1 Control box: for industrial use (MET-us listed with this extra option for 480 volts). **[$670]**

BELL-LIFT OPTION FOR X3200 OR T3400

Available on any X3200 series or T3400 series.

Includes hand operated winch. Safety Latches are included. Specification sheet: **hotkilns.com/spec-bell-lift**

Bell-Lift Option [$4850]

Motorized Winch (instead of hand winch). **[$1200]**

Model No.	Kiln Price	Power Botm	High Power	Furn Kit	Quad Elem	Shelves in Furn Kit	Post Kits	Inside W x D	Inside Height	Cubic Feet	External Dimensions	Stand KW	High KW	240/1 Fuse	240/3 Fuse	208/1 Fuse	208/3 Fuse	Lbs Kiln	Lbs w/Kit
XB2318-D	$4710	n/a	n/a	$375	$260	(4) 20" x 10"	(1)	22" Square	18"	5.0	40W x 32H x 42D	8.9	n/a	50	40	60	50	600	650
X2327-D	$5195	n/a	$35	$475	$360	(6) 20" x 10"	(1)	22" Square	27"	8.1	40W x 41H x 42D	11.7	13.4	60	40	70	40	700	765
X2336-D	$5895	n/a	$75	$725	$480	(8) 20" x 10"	(2)	22" Square	36"	10.8	40W x 50H x 42D	15.6	17.9	80	60	90	60	775	870
X2345-D	$6535	n/a	$100	$820	$590	(10) 20" x 10"	(2)	22" Square	45"	13.5	40W x 59H x 42D	19.5	22.3	100	40	125	80	875	985
XB2818-D	$5560	$750	n/a	$410	$285	(4) 23" x 11.5"	(1)	26.5" Square	18"	7.8	45W x 32H x 43D	11.6	n/a	60	60	70	60	725	795
X2827-D	$6670	$750	$60	$530	$410	(6) 23" x 11.5"	(1)	26.5" Square	27"	11.7	45W x 41H x 43D	14.9	17.4	80	50	90	60	835	935
X2836-D	$7470	$750	$95	$820	$540	(8) 23" x 11.5"	(2)	26.5" Square	36"	15.6	45W x 50H x 43D	19.9	23.2	100	70	125	80	935	1075
X2845-D	$8240	$750	$125	$940	$695	(10) 23" x 11.5"	(2)	26.5" Square	45"	19.5	45W x 59H x 43D	24.9	29.0	125	90	150	100	1050	1220
XB3218-D	$6335	$900	n/a	$495	$335	(4) 28" x 14"	(1)	30.5" Square	18"	10.0	49W x 32H x 49D	14.2	n/a	80	70	90	80	880	985
X3227-D	$7440	$900	$120	$655	$515	(6) 28" x 14"	(1)	30.5" Square	27"	15.0	49W x 41H x 49D	18.0	21.3	100	60	125	70	1000	1150
X3236-D	$8440	$900	$140	$970	$695	(8) 28" x 14"	(2)	30.5" Square	36"	20.0	49W x 50H x 49D	24.4	28.4	125	80	150	100	1135	1340
X3245-D	$9375	$900	$185	$1135	$850	(10) 28" x 14"	(2)	30.5" Square	45"	25.0	49W x 59H x 49D	30.5	35.5	175	125	200	125	1275	1525
TB2318-D	$6270	$1030	n/a	$510	$335	(6) 22" x 11"	(1)	26.5" x 34.75"	18"	9.7	54W x 32H x 43D	15.3	n/a	80	70	100	80	900	995
T2327-D	$7340	$1030	$120	$685	$515	(9) 22" x 11"	(1)	26.5" x 34.75"	27"	14.6	54W x 41H x 43D	19.5	23.0	100	60	125	70	1035	1175
T2336-D	$8085	$1030	$140	$1025	$695	(12) 22" x 11"	(2)	26.5" x 34.75"	36"	19.4	54W x 50H x 43D	26.0	30.7	125	90	150	100	1165	1355
T2345-D	$9115	$1030	$185	$1190	$850	(15) 22" x 11"	(2)	26.5" x 34.75"	45"	24.3	54W x 59H x 43D	32.5	38.4	175	125	200	125	1300	1530
TB3418-D	$6770	$1215	n/a	$790	$410	(6) 28" x 14"	(2)	30.5" x 43.5"	18"	13.8	62W x 32H x 49D	19.9	n/a	100	90	125	100	1065	1225
T3427-D	$7925	$1215	$140	$1045	$620	(9) 28" x 14"	(2)	30.5" x 43.5"	27"	20.7	62W x 41H x 49D	24.9	36.5	125	80	150	90	1225	1455
T3436-D	$9180	$1215	$180	$1280	$825	(12) 28" x 14"	(2)	30.5" x 43.5"	36"	27.6	62W x 50H x 49D	33.3	39.9	175	125	200	125	1475	1775
T3445-D	$10,740	$1215	$205	$1745	$1030	(15) 28" x 14"	(3)	30.5" x 43.5"	45"	34.5	62W x 59H x 49D	41.6	49.8	200	150	225	175	1675	2050

More: See see various DaVinci specification sheets at **hotkilns.com/spec-davinci** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. **Power Hookup:** Direct wired - no plugs. For controls see **hotkilns.com/dynatrol** and **hotkilns.com/zone.**

Crating: Protected with wood crate and foam-in-place packaging for shipment by Common Carrier. Depending on the model there are either two or three crates. Some smaller models can ship in skidded cartons.

HERCULES KILNS

Professional Medium Front-Loading Kilns

This is a great value in medium-sized front-loading kilns. Elements in the door, gasketed plug door, arched roof, door shut-off switch - all are standard at an excellent price.

Woven tadpole fibreglass door gasket for superior door seal

4-1/2" thick K25 Full Arch for extra strength

Door Elements for Even Heating

Features & Benefits for Hercules & Easy-Load

- Adjustable door with plug seal and fiberglass tadpole gasket for tight seal
- Heavy 12 and 10 gauge welded powder-coated case with stand and leveling pads
- Extra-tough High Temperature 2500°F 4-1/2" firebrick arch. Other insulation is 3" of K23 brick with 2" of mineral wool backup insulation
- Elements on door, sides and back for even firing
- Door power safety shut-off switch
- Hard ceramic element holders
- DynaTrol with Dynamic Zone Control (2 zones for EL2424-H, 3 zones for all others)
- Type K 8 gauge thermocouples with ceramic protection tubes
- Control panel mounted with air space between it and the case
- Branch fusing in control panel
- Solid peephole plugs with full 1" view in the door (2 for EL2424H, 3 for all others)
- Proprietary reflective brick coating that protects brick and minimizes dusting
- MET-us listed to UL499 standards

Thick Powder-Coated Steel Case

Welded Stand (can be removed on Hercules kilns). Move by pallet jack from all four sides.

Safety Door Switch shuts off power when door is opened.

MANUAL VENTILATION AND COOOLING SYSTEM

There is a 2-3/4" by 1-7/8" brick plug on the top of the kiln and a sliding damper on the bottom to allow you to introduce cool air into the kiln without opening the door. (Note: this is not meant to replace the recommended Vent-Sure downdraft vent system).

Model No.	Price	Furn Kit	Inside Dimensions	Cubic Feet	Hearth Size	Shelves in Furn Kit	Hearth Height	KW	240/1 Amp~Fuse	240/3 Amp~Fuse	208/1 Amp~Fuse	208/3 Amp~Fuse	480/3 Amp~Fuse	Lbs Kiln	Lbs w/Kit
EL2424H	**$8550**	**$375**	25W x 26D x 24H	8	22" x 22"	(4) 11" x 22"	30"	15.0	63.0~80	55.0~70	73.0~90	63.0~80	28.0~40	1075	1250
EL2427H	**$9350**	**$485**	25W x 26D x 27H	9	22" x 22"	(6) 11" x 22"	30"	15.0	68.8~90	39.6.0~50	79.3~100	45.7~60	19.8~25	1200	1450

Furniture Kit: Includes the Cone 11 shelves listed above plus the Large Square Post Kit, insulated gloves for unloading, and 1 lb of Cone 10 kiln wash.

More: See **hotkilns.com/spec-hercules** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. **Power Hookup:** Direct wired. For controls see **hotkilns.com/dynatrol** and **hotkilns.com/zone**.

EASY-LOAD KILNS

Professional Large Front-Loading Kilns

Big, strong, well-built - if you need a large front-loading kiln we have it. L&L has been building front-loading kilns for over 65 years.

These are excellent kilns for large studios, universities, and advanced high schools as well as for industrial applications. This is a fully loaded EL2436.

Options for Hercules & Easy-Load

FURNITURE KIT

Includes Cone 11 full shelves and half shelves as listed below plus a post kit which includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts plus heat-resistant gloves and 1 pound of cone 10 kiln wash. **[Prices below]**

POWERFUL VENT-SURE DOWNDRAFT KILN VENT

Vent-Sure 130 CFM downdraft vent. See page 17. **[$465]**

CONTROL OPTIONS

Type S platinum thermocouples [$225 each]

Pyrocil metallic sheathed thermocouples [$25 each]

KISS Computer Monitoring/Control. **[$575]**

High Limit Back Up Digital Control (latching relay back up control system). **[$575]**

Back Up Contactors (actuated by the High Limit Back Up Digital Control). **[$550]**

120 volt power supply with EMI electrical noise filter for the automatic control. **[$190]**

VOLTAGE OPTIONS

240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. **[No Charge except for 480 volts]**

480 volts/3 phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box). **[$670]**

NEMA 1 Control box: for industrial use (MET-us listed with this extra option for 480 volts). **[$670]**

SPECIAL HINGE MOUNTING

Hinge mounted on right and panel mounted on left (Special order: allow extra production time). **[$950]**

Model No.	Price	Furn Kit	Inside Dimensions	Cubic Feet	Hearth Size	Shelves in Furn Kit	Hearth Height	KW	240/1 Amp~Fuse	240/3 Amp~Fuse	208/1 Amp~Fuse	208/3 Amp~Fuse	480/3 Amp~Fuse	Lbs Kiln	Lbs w/Kit
EL2436	**$13,750**	**$755**	25W x 25D x 36H	12	22" x 22"	(8) 11" x 22"	29"	19.0	80.0~100	46.0~60	92.0~125	53.0~70	24.0~30	1350	1500
EL2448	**$16,775**	**$865**	25W x 25D x 48H	16	22" x 22"	(10) 11" x 22"	18"	24.2	101.0~125	59.0~80	117.0~150	68.0~90	30.0~40	1500	1750
EL2848	**$18,025**	**$1155**	31W x 25D x 48H	20	28" x 24"	(12) 14" x 24"	18"	27.0	113.0~150	66.0~90	130.0~175	75.0~100	33.0~50	1750	2000
EL3048	**$20,850**	**$1210**	31W x 31D x 48H	25	28" x 28"	(12) 14" x 28"	18"	31.5	132.0~175	76.0~100	152.0~200	88.0~125	39.0~50	2000	2300

Furniture Kit: Includes Cone 11 shelves listed above plus 2 Large Square Post Kits, insulated gloves for unloading, and 1 lb of Cone 10 kiln wash.

More: See **hotkilns.com/spec-easy-load** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. **Power Hookup:** Direct wired. For controls see **hotkilns.com/dynatrol** and **hotkilns.com/zone.**

Shipping & Moving: All the kilns except the EL3048 will go through a 34-1/2" wide by 75" high door. The EL3048 needs a minimum door size of 40-1/2" wide by 76" high. All Easy-Load and Hercules kilns can be moved with a pallet-jack from any side. Crated with interior support and air-cushion skids. Shipping by air-ride truck. Fill out installation checklist prior to order: **hotkilns.com/front-load-checklist**.

LIBERTY-BELLE

A Simple Hobby Kiln

The perfect hobby kiln and great for people who need to stay portable. The 12 foot cord plugs into your dryer outlet!

Features & Benefits

- One-Touch™ Intuitive Kiln Control
- 12 foot long cord with Nema 14-30 dryer type plug
- Cone 10 • 2350°F • 1290°C
- Hard ceramic element holders
- Full support 14 gauge aluminized steel stand
- Solid peephole plugs with full 1" view
- Proprietary reflective brick coating
- c-MET-us listed to UL499 standards
- Three-year Limited Warranty

Options

240, 220 or 208 single phase are all standard options. 3 phase not available. **[No Charge for any voltage options]**

Quad Element System (watts & amps do not change - elements doubled & more massive with Quad system). **[Prices below]**

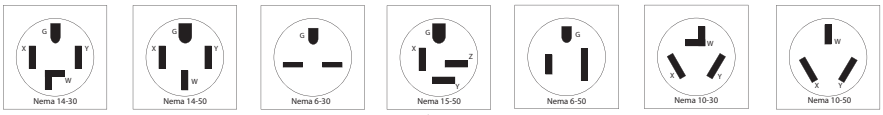
Vent-Sure Kiln Vent. See page 17. **[$465]**

PLUG & CORD OPTIONS

Standard Nema 12 foot long 14-30 plug can be changed by customer to Nema 14-50 (hardware is included to do this).

A 12 foot Nema 6-30 plug, Nema 15-50 or 6-50, Nema 10-30 or NEMA 10-50 plug is available for prices below. A 6 foot long 6-50 plug is available at No charge.

All plugs can be easily changed in the field.



[Standard] [Standard] [No charge] [$65] [$65] [$65] [$65]

Model No.	Kiln Price	Furn Kit	Quad Elem	No. of Shelves F=full, H=half	Brick Thick	Inside Diam	Inside Height	Cubic Feet	Exterior Dimensions	240V KW~Amp~Fuse	208V KW~Amp~Fuse	Ship Lbs	Lbs w/Kit
LB18	$1650	$225	$180	15.5" (1F, 4H)	2.5"	17.5"	18"	2.6	29W x 31H x 30D	5.7~23.9~30	5.0~23.9~30	200	240
LB18-3	$1700	$225	$180	15" (1F, 4H)	3"	16.5"	18"	2.5	29W x 32H x 30D	5.7~23.9~30	5.0~23.9~30	215	250

Furniture Kit: Includes Cone 11 shelves as listed above plus four each of 1", 2", 4" and 6" triangular posts plus one lb of Cone 10 kiln wash. You can substitute two half shelves for one full shelf at no charge.

More: See **hotkilns.com/spec-liberty-belle** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. Also see **hotkilns.com/Spec-One-Touch** for more information about the One-Touch™ control.

EASY-FIRE XT

Square Kilns with Easy-Fire Control Panel

- Same basic control panel and other features as 3" Easy-Fire kilns
- Same square body shape used in our DaVinci Series with strong arched sides with extra space added to interior dimensions for good air circulation
- Stainless steel spring hinge used on the Easy-fire kilns
- 6-50 or 15-50 plug on most models (some are direct wired - see specification sheet)
- Three-year Limited Warranty

Not listed to UL499

Model No.	Kiln Price	Furn Kit	Quad Elem	Shelves in Furn Kit	Inside W x D	Inside Height	Cubic Feet	External Dimensions	Stand KW	240/1 Amp~Fuse	240/3 Amp~Fuse	208/1 Amp~Fuse	208/3 Amp~Fuse	Lbs Kiln	Lbs w/Kit
E2318-XT	$3680	$375	$260	(4) 20" x 10"	22" Square	18"	5.0	40W x 32H x 42D	9.5	39.4~50	34.1~40	45.5~60	39.4~50	500	550
E2327-XT	$4155	$475	$360	(6) 20" x 10"	22" Square	27"	8.1	40W x 41H x 42D	11.5	48.8~60	27.1~40	48.0~60*	32.0~40	600	665
E2818-XT	$4490	$410	$285	(4) 23" x 11.5"	26.5" Square	18"	7.8	45W x 32H x 43D	11.5	48.0~60	41.6~60	48.0~60*	48.0~60	625	695
E2827-XT	$5510	$530	$415	(6) 23" x 11.5"	26.5" Square	27"	11.7	45W x 41H x 43D	14.9	48.0~60*	41.6~60	48.0~60*	48.0~60	735	835

Furniture Kit: Includes Cone 11 shelves listed above plus Large Square Post Kit, insulated gloves for unloading, and 1 lb of Cone 10 kiln wash.

Cone Rating and Special High Amperage Models: Most models are rated to Cone 10. Most models have cords but a few require a direct hookup. *These 60 amp models are not rated to cone 10 and do not have the standard KW but most are available in a higher amperage/ KW direct-wire cone 10 version. See **hotkilns.com/spec-easy-fire-xt** for shipping dimensions, electrical ratings, fuse and wire sizes, cone rating, and special higher KW models.

JH SERIES

Crystalline Glaze Kilns

This is the "Thoroughbred" of kilns. Designed specifically for Crystalline Glaze firing - fast, responsive and precise.

Not UL499 Listed except for the e23S-JH

Features & Benefits

- **Designed specifically for firing crystalline glaze with fast heat up, fast cool down to freeze crystals and the ability to soak without prematurely aging elements**
- **Cone 12 • 2400°F • 1315°C**
- **Includes 2-1/2" of K25 2500°F firebrick on sides and bottom with a 3" thick top**
- **Approximately 25% more power than base models**
- **Quad element holder system with super heavy-duty elements**
- **Type S platinum thermocouples included as standard**
- **DynaTrol with Dynamic Zone Control**
- **Includes other features that are standard on the base models**
- **Three-year Limited Warranty**

Options

FURNITURE KIT

Includes Cone 11 full shelves and half shelves as listed below plus a post kit, heat-resistant gloves and 1 lb of cone 10 kiln wash.

VENT-SURE DOWNDRAFT VENT

Vent-Sure 130 CFM downdraft vent. See page 17. **[$465]**

CONTROL OPTION

KISS Computer Monitoring/Control. **[$575]**

ELEMENT OPTION

Apm Elements [See below]

VOLTAGE OPTIONS

Order 240 or 208 volts, single or three phase, or international voltages. KW, amperage, and fuse size for each voltage below. 480 volts is not available.
[No Charge for any voltage options]

Model No.	Kiln Price	APM Elements	Furn Kit	No. of Shelves F=full, H=half	Inside Diam	Inside Height	Cubic Feet	240/1 KW~Amp~Fuse	240/3 KW~Amp~Fuse	208/1 KW~Amp~Fuse	208/3 KW~Amp~Fuse	Lbs Kiln	Lbs w/Kit
JD18-JH	$2730	$595	$310	15.5" (1F, 4H)	17.5"	18"	2.6	8.8~36.7~60	8.8~31.7~50	8.8~42.3~60	8.8~36.8~50	255	300
e23S-JH	$3190	$705	$350	21" full (1F, 4H)	23.5"	18"	4.7	10.5~47.9~60	n/a	10.0~48.0~60	n/a	280	365
JD230-JH	$5055	$1055	$435	21" full (2F, 4H)	23.5"	27"	7.0	13.7~57.0~80	13.7~32.9~50	12.5~60.0~80	12.5~34.7~50	400	505
JD2927-JH	$6430	$1090	$665	25.5" (8H)	29"	27"	10.3	18.0~75.2~100	18.0~43.5~60	18.0~86.7~125	18.0~50.1~70	580	710

More: See **hotkilns.com/spec-jh** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes. For controls see **hotkilns.com/dynatrol** and **hotkilns.com/zone**. Plugs vary with model, voltage and phase. See Specification sheet.

DL SERIES

Test Kilns

Not UL499 listed

The DL Series is a small test kiln available in 120, 208 or 240 volts and with either a One-Touch program control or DynaTrol. It has the full range of premium L&L featrures such as hard ceramic element holders, Type K 8 gauge thermocouple with ceramic protection tube, full support 14 gauge aluminized steel stand, solid peephole plug with full 1" view, proprietary reflective brick coating that protects brick and minimizes dusting, and three-year limited warranty.

Cubic Feet: 0.5 **Inside Diameter:** 11" **Inside Height:** 9" **Outside Width:** 19" **Outside Depth:** 23"

Model No.	Kiln Price	Furn Kit	Temperature Control	Cone Rating	Watts	Amps	Volts	Fuse	Plug	Lbs Kiln	Lbs w/Kit
DL11-DB	$1125	$155	One-Touch	5	1800	15	120	20	5-15R	110	130
DLH11-DB	$1125	$155	One-Touch	6	2160	18	120	25	5-20R	110	130
DLH11-DXB-240	$1125	$155	One-Touch	10	2800	11.7	240	15	14-30R	110	130
DLH11-DXB-208	$1125	$155	One-Touch	10	2800	13.5	208	20	14-30R	110	130
DL11-D	$1260	$155	DynaTrol	5	1800	15	120	20	5-15R	110	130
DLH11-D	$1260	$155	DynaTrol	6	2160	18	120	25	5-20R	110	130
DLH11-DX	$1260	$155	DynaTrol	10	2800	11.7	240	15	14-30R	110	130
DLH11-DX	$1260	$155	DynaTrol	10	2800	13.5	208	20	14-30R	110	130

Furniture Kit: Includes two 9" diameter full shelves and four each of 1/2", 1", 1-1/2", 2", 2-1/2", 3" and 4" triangular posts plus 1 lb of Cone 10 kiln wash.

More: See **hotkilns.com/spec-doll** for additional information like shipping dimensions, electrical ratings, fuse sizes and wire connection sizes.

NOTE: The 240 or 208 volt versions are highly recommended for high fire applications.

SUPERIOR KILN FURNITURE

Posts & Post Kits

PERFECT POSTS

L&L sells the highest grade ceramic extruded posts. They are very straight (even in lengths up to 12" long), precision cut for squareness (which makes shelves stable), and are strong without being excessively thick.

POST KITS

Large Square Post Kit
(Six each 1/2", 1", 2", 4", 6" & 8" square posts) (C-G-SPKT/EZ) $155

Small Square Post Kit
(Four each 1/2", 1", 2", 4", 6" & 8" square posts) (C-G-SPKT/SM)..... $102

DL Series Post Kit
(Four each of 1/2", 1", 1-1/2", 2", 2-1/2", 3" and 4" triangular posts)
(C-G-TPKT/DB)..... $64

Liberty-Belle Post Kit
(Four each 1", 2", 4" & 6" triangular posts)
(C-G-TPKT/LB) $43

Large Triangular Post Kit
(Six each 1/2", 1", 1-1/2", 2", 2-1/2", 3", 4", 5" & 6" triangular posts)
(C-G-TPKT/01)..... $125

Small Triangular Post Kit
(Four each 1", 2", 3", 4", 5" & 6" triangular posts) (C-G-TPKT/00) $68

SQUARE POSTS (1-1/2" SQUARE)

1/2" Square Post (C-G-S005/00) $2.50
1" Square Post (C-G-S010/00) $3.25
2" Square Post (C-G-S020/00) $3.90
4" Square Post (C-G-S040/00) $4.25
6" Square Post (C-G-S060/00) $5.35
8" Square Post (C-G-S080/00) $6.40
10" Square Post (C-G-S100/00) $8.00
12" Square Post (C-G-S120/00) $9.85

TRIANGULAR POSTS

NOTE: Single triangular posts are available on the web.

FREIGHT FOR SHELVES AND FURNITURE KITS

Depending on the quantity and size of shelves, posts and furniture kit(s) ordered, the order may have to ship by common carrier freight. **[Skid/carton charge: $40]**

Round & Polygonal Shelves

11" DIAMETER KILNS

For Doll/Test Kilns

Full Round 9" diameter shelf (7/16" thick)
(H-D-9000/00) $28

14" DIAMETER KILNS

For J14 Kilns and Fuego Kilns

Full Round 13" diameter (1/2" thick)
(H-J-1300/00)..... $32

Half Round 13" diameter (1/2" thick)
(H-J-1350/00)..... $19

16-1/2" DIAMETER KILNS

For LB18-3, e18S-3 & e18T-3, and J18-3 kilns with 3" brick

Full Round 15" diameter (5/8" thick)
(H-J-150A/00) $40

Half Round 15" diameter (5/8" thick)
(H-J-155A/00) $24

17-1/2" DIAMETER KILNS

For LB18, e18S & T, and J18 kilns with 2-1/2" brick

Full Octagonal 15-1/2" diameter (5/8" thick) (H-J-1500/00) $40

Half Octagonal 15-1/2" diameter (5/8" thick)(H-J-1550/00) $24

22" DIAMETER KILNS

For e23S-3, e23T-3, SM23T-3, & J2300-3 kilns with 3" brick

Full Round 20" diameter (3/4" thick)
(H-J-2000/00)..... $78

Half Round 20" diameter (3/4" thick)
(H-J-2050/00)..... $39

23" DIAMETER KILNS

For e23S, e23T, SM23T & J2300 kilns with 2-1/2" brick

Full Round 21" diameter (3/4" thick)
(H-J-2100/00)..... $79

Half Round 21" diameter (3/4" thick)
(H-J-2150/00)..... $40

28" & 29" DIAMETER KILNS

For e28S, e28T, SM28T, J2900 Series with 2-1/2" or 3" brick

Half Round 25-1/2" diameter (3/4" thick)
(H-J-2650/00)..... $67

Square & Rectangular Shelves

SHELF MATERIAL AND RATING

All shelves that are 15" in diameter and above are made of a press-molded (not cast) high alumina cordierite body that holds up to Cone 11 firing with little warping. This is particularly important for larger shelves.

17" SQUARE KILNS

For SQ1818, SQ1827, X1800 Series, EL1824, EL3648

8" x 16" rectangular (5/8" thick)
(H-S-1608/00) $35

16" x 16" square (3/4" thick)
(H-S-1616/00) $67

22" SQUARE KILNS

For X2300 Series

20" x 10" rectangular (5/8" thick)
(H-X-2010/00) $47

26" SQUARE KILNS

For X2800 Series and X2800-XT Series

23" x 11-1/2" rectangular (3/4" thick)
(H-X-2311/00) $60

26" X 35" RECTANGULAR KILNS AND 24" SQUARE FRONT-LOADERS

For T2300 Series, T2300-XT Series, EL2424-H, EL2427-H, EL2436 & EL2448

22" x 11" rectangular (3/4" thick)
(H-X-2211/00) $56

30" X 28" FRONT LOADER KILNS

For EL2848

24" x 14" rectangular (3/4" thick)
(H-J-2414/00)..... $70

30" SQUARE, & 30" X 43" RECTANGULAR KILNS

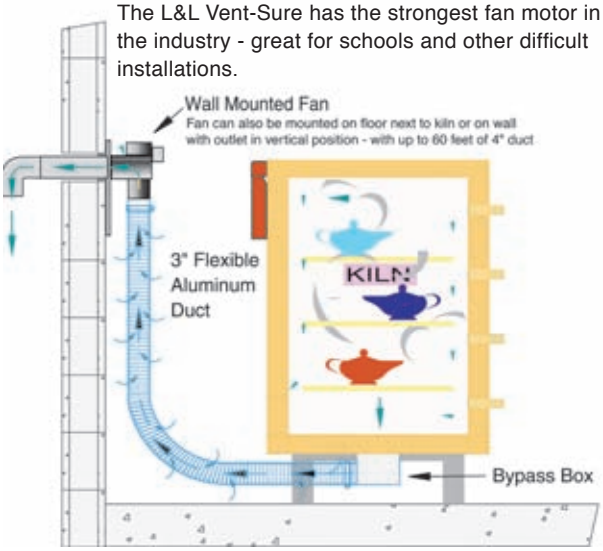
For X3200 Series, T3400 Series & EL3048

28" x 14" rectangular (3/4" thick)
(H-J-2814/00)..... $76

OPTIONS AND ACCESSORIES

VENT-SURE DOWNDRAFT KILN VENT SYSTEM

The L&L Vent-Sure has the strongest fan motor in the industry - great for schools and other difficult installations.


Wall Mounted Fan
Fan can also be mounted on floor next to kiln or on wall with outlet in vertical position - with up to 60 feet of 4" duct
3" Flexible Aluminum Duct
KILN
Bypass Box

MORE INFORMATION: **hotkilns.com/vent-sure**

PRICES

VENT-SURE KILN VENT: [$465]

220-240 VOLT VENT-SURE: [No Charge]

MULTI-POSITION MOUNTING BRACKET for mounting motor on floor or in vertical position on wall. **(hotkilns.com/multi)**: [$25]

VENT DOUBLER (includes all the parts necessary to vent two kilns (up to 10 cubic feet each) with one vent **(hotkilns.com/doubler)**: [$140]

Features

- **Downdraft venting pulls air down to bottom of kiln**
- **Improves temperature uniformity inside the kiln**
- **Powerful 130 CFM fan motor, typically mounted on wall, allows fumes to be under vacuum in your studio**
- **The strong fan motor helps overcome static pressure in long exhaust lines. The duct may be up to 60 feet in length, and include up to four 90° bends**
- **120 volts with on/off switch on cord (240 volts available)**
- **15 foot long flexible aluminum duct**
- **Bypass collection box mounted on kiln allows adjustment of venting.**
- **Fan motor, mounted away from the kilns, stays cool and no vibration transmitted to the kiln**
- **Three-year Limited Warranty**
- **c-MET-us Listed to UL499 standards for use on c-MET-us L&L Kilns (Easy-fire, School-Master, Jupiter, Davinci, Ergo-Lift). MET-us Listed to UL499 standards on Hercules, and Easy-Load kilns).**

CONTROL & POWER OPTIONS

INDUSTRIAL CONTROLS: Three zone Eurotherm control plus others. **(hotkilns.com/ eurotherm3).** [Custom pricing]

480 VOLTS/3 PHASE: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480).** [$670]

NEMA 1 CONTROL BOX: for industrial use (480 volts becomes MET-us listed with this extra option). **[$670]**

KISS SOFTWARE: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss).** [$575]

HIGH LIMIT BACK UP CONTROL (latching relay back up control system) **(hotkilns.com/high-limit)**. [$575]

BACK UP CONTACTORS (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)** [Price Varies with model]

120 VOLT POWER SUPPLY: with EMI electrical noise filter **(hotkilns.com/noise).** [$190]

THERMOCOUPLE OPTIONS

TYPE S THERMOCOUPLES: The best thermocouple for constant high fire applications. No thermocouple drift. **(hotkilns.com/type-s)**. [$225 each]

PYROCIL SHEATHED THERMOCOUPLES: For greater sensitivity to temperature change. Use below 2200°F for sensitivity (glass is a good example) **(hotkilns.com/pyrocil-tc)**. [$25 each]

ELEMENT OPTIONS

QUAD ELEMENT OPTION: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)** [See price grids]

APM SINTERED ELEMENTS: Available as a special option. Increases element life in certain situations. **(hotkilns.com/apm).** [Custom pricing]

POWERED BOTTOMS

Available on some Jupiter and DaVinci kilns. [See price grids]

BELL LIFT FOR 28" DIAMETER KILNS

For any 28" diameter kilns that are either 27" or 36" high. Manual or electric winch. Load directly on the base. Load large work like sculpture. **(hotkilns.com/bell-lift-28)** [$1500 for Bell-Lift System. Electric winch add $800]

CUSTOM, INDUSTRIAL & COMMERCIAL KILNS

Years of Custom Design Experience

L&L kilns are used in many industries including advanced industrial ceramics, abrasives, aerospace, piezo ceramics, optical glass, heating processes, melting, preheating for welding, annealing, stress-relieving, solution hardening, calcining, and steel heat treating.

The wide range of standard designs and built-in heavy-duty durability features allow L&L to quickly and economically configure many designs for rigorous production use.

Special industrial controls are available from Eurotherm, Honeywell, Watlow and others.

Our sister company, L&L Special Furnace Co., Inc., makes aerospace grade heat treating furnaces.

Call L&L to discuss your needs. We have years of experience to share.

(hotkilns.com/industry)

LARGE SQUARE & RECTANGULAR KILNS

hotkilns.com/custom-davinci-kilns

L&L designs and builds custom square and rectangular DaVinci kilns. Sizes are very flexible. The top is typically made of 4” thick ceramic fiber modules.

CAR BOTTOM KILNS

hotkilns.com/car-bottom-kilns

The ELC3648 Car Kiln works with a standard pallet jack for easy moving of the car and great sealing.

JUMBO 100 CU FT BELL-LIFT KILN

hotkilns.com/jumbo-bell-lift-kilns

MODEL TB644754

100 cubic feet:
(66” Wide x 47” Deep x 54” High)

Motorized winch is included. Safety Latches are included. Available with wheeled cars. Available in other sizes.

ERGO-LIFT KILNS

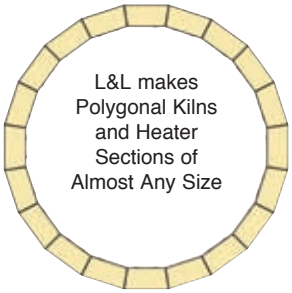
hotkilns.com/ergo-lift-kilns

Ergo-Lift kilns are designed to provides easy and ergonomic loading while providing the advantages of a top loading kiln such as ease of maintenance, easier moving of the kiln and protection from the hot case. They are based on L&L’s proven DaVinci square and rectangular kiln line. They include hard element holders, protected thermocouples, three zone control, a hand operated or motorized brake winch and safety latches.

CUSTOM LARGE POLYGONAL KILNS

hotkilns.com/large-polygonal-kilns

Custom polygonal kilns with 4-1/2” of firebrick are available by special quote. L&L can make almost any diameter and any height in multiples of 9” high sections. There are three elements per 9” high section. The base is made of welded angle-iron with leveling bolts. The bottom is typically 4-1/2” of K23 brick. These are typically cemented in sections and then held together with a stainless steel band. The top is typically made of 4” thick folded and formed ceramic fiber modules. Temperatures are limited to 2350°F (1285°C).



LARGE FRONT-LOAD KILNS

hotkilns.com/large-custom-front-loading-kilns

We design and build special larger front-loading kilns beyond the standard EL sizes.

Easy-Fire e18S • e18T • e18S-3 • e18T-3

8-Sided Kilns • 2.6 to 3.7 Cubic Feet • Cone 10 • 2-1/2” & 3” Brick

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that loading is easy.

Hinge: The hinge is not spring-loaded. Chains are used to secure the lid in place when open.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two or three 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: Choice of 2-1/2” or 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 2 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. A layer of insulation and this separation helps keep the controls cool. The control panel and element box are hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or three zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Power Cord/Plug: 50 Amp NEMA 6-50 six foot cord included for one phase, 50 Amp NEMA 15-50 six foot cord included for three phase.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. In addition a web videos show how to assemble the kiln and how to fire it. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

The Easy-Fire kiln meets the needs of teachers, institutions, camps, hobbyists, potters and others who need an easy to operate, easy to set up, easy to maintain, easy to understand, and easy to buy kiln. It has L&L’s robust and time-proven technology like ceramic element holders, industrial-grade element terminals, ceramic thermocouple protection tubes, heavy-duty elements, corrosion resistant materials, removable control panel and zone control with four “Easy-Fire” programs.

L&L Kilns hotkilns.com
505 Sharptown Road • Swedesboro, NJ 08085
Phone: 856.294.0077 • Fax: 856.294.0070
sales@hotkilns.com • hotkilns.com

KILNS BUILT TO LAST

Bulletin No: e18-3-15P

Easy-Fire e18S • e18T • e18S-3 • e18T-3

Options

Furniture Kits: Shelves are high alumina cone 11 shelves. Shelves are 15” diamter for kilns with 3” brick and 15.5” diameter for kilns with 2.5” brick. Full and half round cordierite shelves. Each post kit includes six each 1/2”, 1”, 2” 4”, 6” and 8” high 1-1/2” square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Graded Elements: Reduces price by eliminating zone control. Zone control can be added later. **(See 2015 Catalog)**

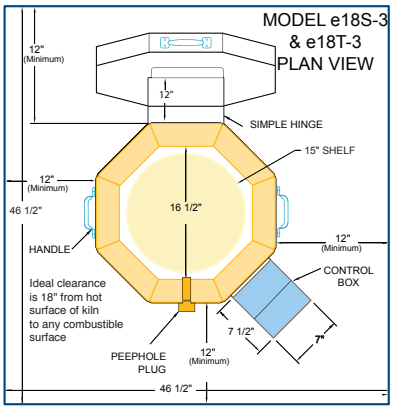
Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4” diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

KISS Software: (**hotkilns.com/kiss)**

Quad Element Design: Extra long element life **(hotkilns.com/quad-element-option)**

Furniture kit for a e18S kiln

Furniture kit for a e18T kiln



Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Brick Thick	Furniture Kit	Furn Kit Part No.	Outside Dimensions	Shipping Dimensions (w Kit)	Ship Wght Kiln Only	Ship Wght Kiln + Kit
e18S	17-1/2”D x 18”H	2.6	2-1/2”	(1) 15-1/2” full, (4) half	H-E-K18S/00	29” W x 31” H x 30” D	36” W x 55” H x 36” D	190 lbs	245 lbs
e18S-3	16-1/2”D x 18”H	2.5	3”	(1) 15” full, (4) half	H-E-K18S/30	29” W x 31” H x 30” D	36” W x 55” H x 36” D	220 lbs	255 lbs
e18T	17-1/2”D x 27”H	3.9	2-1/2”	(2) 15-1/2” full, (4) half	H-E-K18T/00	29” W x 40” H x 30” D	36” W x 60” H x 36” D	230 lbs	305 lbs
e18T-3	16-1/2”D x 27”H	3.7	3”	(2) 15” full, (4) half	H-E-K18T/30	29” W x 40” H x 30” D	36” W x 60” H x 36” D	255 lbs	325 lbs

Minimum Space Requirements: 46-1/2” wide by 46-1/2” deep.

Moving and installation: This comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Electrical Specifications

Model Number	Part Number for 2-1/2” Brick	Part Number for 3” Brick	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
e18S-240 / e18S-3-240	K-E-18SX/31	K-E-18S3/31	240/1P	5,737	23.9	10 ga	30 Amps
e18S-240-3P / e18S-3-240-3P	K-E-18SX/32	K-E-18S3/32	240/3P	5,737	20.7	10 ga	30 Amps
e18S-208 / e18S-3-208	K-E-18SX/21	K-E-18S3/21	208/1P	4,980	23.9	10 ga	30 Amps
e18S-208-3P / e18S-3-208-3P	K-E-18SX/22	K-E-18S3/22	208/3P	4,980	20.8	10 ga	30 Amps
e18T-240 / e18T-3-240	K-E-18TX/31	K-E-18T3/31	240/1P	8,400	35.0	6 ga	50 Amps
e18T-240-3P / e18T-3-240-3P	K-E-18TX/32	K-E-18T3/32	240/3P	8,400	20.2	10 ga	30 Amps
e18T-208 / e18T-3-208	K-E-18TX/21	K-E-18T3/21	208/1P	8,400	40.4	6 ga	60 Amps
e18T-208-3P / e18T-3-208-3P	K-E-18TX/22	K-E-18T3/22	208/3P	8,400	23.3	10 ga	30 Amps

UL Listing: All models are c-MET-us listed to UL499 standard.

Power connection: A six foot cord with a 50 amp NEMA 6-50 for single phase units or a 15-50 plug for 3 phase units is included. (No neutral is necessary). May be direct wired.

Easy-Fire e23S • e23T • e23S-3 • e23T-3

10-Sided Kilns • 4.4 to 7.0 Cubic Feet • Cone 10 • 2-1/2” & 3” Brick

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that loading is easy.

Hinge: Spring loaded for easy opening while still allowing lid to be supported without supports that get in the way of loading.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two or three 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: Choice of 2-1/2” or 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 2 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. A layer of insulation and this separation helps keep the controls cool. The control panel and element box are hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or three zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Power Cord/Plug: 50 Amp NEMA 6-50 six foot cord included for one phase, 50 Amp NEMA 15-50 six foot cord included for three phase.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. In addition a web videos show how to assemble the kiln and how to fire it. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

The Easy-Fire kiln meets the needs of teachers, institutions, camps, hobbyists, potters and others who need an easy to operate, easy to set up, easy to maintain, easy to understand, and easy to buy kiln. It has L&L’s robust and time-proven technology like ceramic element holders, industrial-grade element terminals, ceramic thermocouple protection tubes, heavy-duty elements, corrosion resistant materials, “Easy-Open, Easy-Load” spring hinge, removable control panel and zone control with four “Easy-Fire” programs.

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KILNS BUILT TO LAST

Bulletin No: e23-3-15

Easy-Fire e23S • e23T • e23S-3 • e23T-3

Options

Furniture Kits: Shelves are high alumina cone 11 shelves. Shelves are 20” diamter for kilns with 3” brick and 21” diameter for kilns with 2.5” brick. Full and half round cordierite shelves. Each post kit includes six each 1/2”, 1”, 2” 4”, 6” and 8” high 1-1/2” square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Graded Elements: Reduces price by eliminating zone control. Zone control can be added later. **(See 2015 Catalog)**

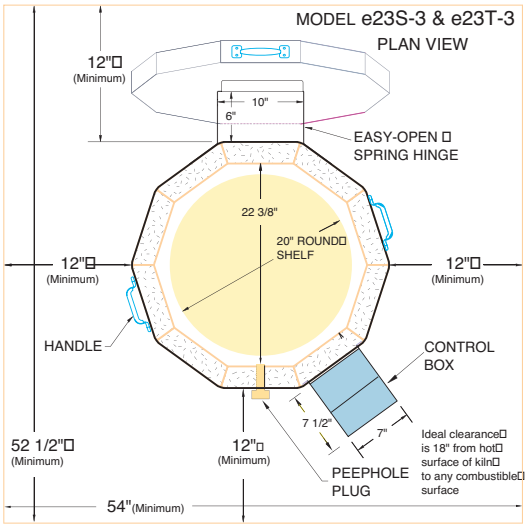
Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4” diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

KISS Software: (**hotkilns.com/kiss)**

Quad Element Design: Extra long element life **(hotkilns.com/quad-element-option)**

Furniture kit for a e23S kiln.

Furniture kit for a e23T kiln.



Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Brick Thick	Furniture Kit	Furn Kit Part No.	Outside Dimensions	Shipping Dimensions (w Kit)	Ship Wght Kiln Only	Ship Wght Kiln + Kit
e23S	23-3/8”D x 18”H	4.7	2-1/2”	(1) 21” full, (4) half	H-E-K23S/00	31” W x 32” H x 42” D	44” W x 55” H x 44” D	265 lbs	375 lbs
e23S-3	22-3/8”D x 18”H	4.4	3”	(1) 20” full, (4) half	H-E-K23S/30	31” W x 33” H x 42” D	44” W x 55” H x 44” D	305 lbs	400 lbs
e23T	23-3/8”D x 27”H	7.0	2-1/2”	(2) 21” full, (4) half	H-E-K23T/00	31” W x 41” H x 42” D	44” W x 60” H x 44” D	325 lbs	445 lbs
e23T-3	22-3/8”D x 27”H	6.7	3”	(2) 20” full, (4) half	H-E-K23T/30	31” W x 42” H x 42” D	44” W x 60” H x 44” D	360 lbs	480 lbs

Minimum Space Requirements: 54” wide by 52-1/2” deep.

Moving and installation: This comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Electrical Specifications

Model Number	Part Number 2-1/2” Brick	Part Number 3” Brick	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
e23S-240 / e23S-3-240	K-E-23SX/31	K-E-23S3/31	240/1P	9,460	39.4	6 ga	50 Amps
e23S-240-3P / e23S-3-240-3P	K-E-23SX/32	K-E-23S3/32	240/3P	9,460	34.1	6 ga	50 Amps
e23S-208 / e23S-3-208	K-E-23SX/21	K-E-23S3/21	208/1P	8,320	40.0	6 ga	50 Amps
e23S-208-3P / e23S-3-208-3P	K-E-23SX/22	K-E-23S3/22	208/3P	8,320	34.6	6 ga	50 Amps
e23T-240 / e23T-3-240	K-E-23TX/31	K-E-23T3/31	240/1P	11,520	48.0	6 ga	60 Amps
e23T-240-3P / e23T-3-240-3P	K-E-23TX/32	K-E-23T3/32	240/3P	11,520	27.7	8 ga	40 Amps
e23T-208 / e23T-3-208	K-E-23TX/21	K-E-23T3/21	208/1P	9,980	48.0	6 ga	60 Amps
e23T-208-3P / e23T-3-208-3P	K-E-23TX/22	K-E-23T3/22	208/3P	11,000	30.5	8 ga	40 Amps

UL Listing: All models are c-MET-us listed to UL499 standard.

Power connection: A six foot cord with a 50 amp NEMA 6-50 for single phase units or a 15-50 plug for 3 phase units is included. (No neutral is necessary). May be direct wired.

Easy-Fire e28S-3 • e28T-3

12-Sided Kilns • 6.8 or 10.2 Cubic Feet • Cone 10 • 3” Brick

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C for all e28S-3 kilns and three phase versions of the e28T-3, See specifications for cone rating of single phase e28T-3.

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that loading is easy.

Hinge: Spring loaded for easy opening while still allowing lid to be supported without supports that get in the way of loading.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two or three 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: 2-1/2” or 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 2 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. A layer of insulation and this separation helps keep the controls cool. The control panel and element box are hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or three zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Power Cord/Plug: 50 Amp NEMA 6-50 six foot cord included for one phase, 50 Amp NEMA 15-50 six foot cord included for three phase.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. In addition a web videos show how to assemble the kiln and how to fire it. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

The Easy-Fire kiln meets the needs of teachers, institutions, camps, hobbyists, potters and others who need an easy to operate, easy to set up, easy to maintain, easy to understand, and easy to buy kiln. It has L&L’s robust and time-proven technology like ceramic element holders, industrial-grade element terminals, ceramic thermocouple protection tubes, heavy-duty elements, corrosion resistant materials, “Easy-Open, Easy-Load” spring hinge, removable control panel and zone control with four “Easy-Fire” programs.

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KILNS BUILT TO LAST

Bulletin No: e28-3-15P

Easy-Fire e28S-3 • e28T-3

Options

Furniture Kits: Shelves are high alumina cone 11 shelves. Shelves are 25.5” diamter half shelves only. Each post kit includes six each 1/2”, 1”, 2” 4”, 6” and 8” high 1-1/2” square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Graded Elements: Reduces price by eliminating zone control. Zone control can be added later. **(See 2015 Catalog)**

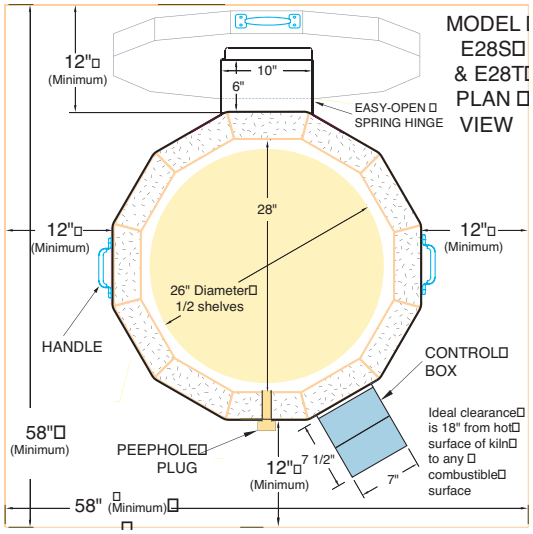
Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4” diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

KISS Software: (**hotkilns.com/kiss)**

Quad Element Design: Extra long element life **(hotkilns.com/quad-element-option)**

Furniture kit for a e28S-3 kiln.

Furniture kit for a e28T-3 kiln.



Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Brick Thick	Furniture Kit	Furn Kit Part No.	Outside Dimensions	Shipping Dimensions (w Kit)	Ship Wght Kiln Only	Ship Wght Kiln + Kit
e28S-3	28”D x 18”H	6.8	3”	(6) 25-1/2” half	H-E-K28S/00	37” W x 33” H x 48” D	48” W x 55” H x 44” D	370 lbs	495 lbs
e28T-3	28”D x 27”H	10.2	3”	(8) 25-1/2” half	H-E-K28T/00	37” W x 42” H x 48” D	48” W x 60” H x 44” D	460 lbs	610 lbs

Minimum Space Requirements: 58” wide by 58” deep.

Moving and installation: This comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.’

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Max Cone	Amps	Wire Size	Fuse Size
e28S-3-240	K-E-28SX/31	240/1P	11,500	10	47.9	6 ga	60 Amps
e28S-3-240-3P	K-E-28SX/32	240/3P	11,500	10	41.5	6 ga	60 Amps
e28S-3-208	K-E-28SX/21	208/1P	9,984	10	48.0	6 ga	60 Amps
e28S-3-208-3P	K-E-28SX/22	208/3P	9,984	10	41.6	6 ga	60 Amps
e28T-3-240	K-E-28TX/31	240/1P	11,520	8	48.0	6 ga	60 Amps
e28T-3-240-3P	K-E-28TX/32	240/3P	16,620	10	40.0	6 ga	50 Amps
e28T-3-240-3P-40A	K-E-28TL/32	240/3P	11,520	5	27.7	8 ga	40 Amps
e28T-3-208	K-E-28TX/21	208/1P	9,980	5	48.0	6 ga	60 Amps
e28T-3-208-3P	K-E-28TX/22	208/3P	14,340	10	39.8	6 ga	50 Amps
e28T-3-208-3P-40A	K-E-28TL/22	208/3P	11,520	5	32.0	8 ga	40 Amps

UL Listing: All models are c-MET-us listed to UL499 standard.

Note about high fire: If you plan to fire regularly to higher temperatures like cone 6 and you only have single phase electric it is recommended to get a Jupiter JD2927-3 or an eQ2827-3. Those models have higher watts and amperage in the single phase versions. The 3 phase e28T-3, on the other hand, has more than enough power to get to Cone 10 consistently.

Power connection: A six foot cord with a 50 amp NEMA 6-50 for single phase units or a 15-50 plug for 3 phase units is included. (No neutral is necessary). May be direct wired.

School-Master K-12 School Kilns

One-Touch Intuitive Kiln Control • 6.7 to 10.2 Cubic Feet • Cone 6

Features & Benefits

Temperature Rating: All models rated for Cone 6 (2230°F, 1220°C) except for the SM28T-3, 208V/1 phase which is rated for Cone 5 (2170°F, 1190°C).

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that the loading is easy and unobstructed.

Hinge: Spring loaded for “feather-lite” easy opening.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Three 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws.

Insulation: 2-1/2” or 3” K23 firebrick depending on model.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Six heavy-duty graded elements.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a hinged control panel/element connection box. A layer of insulation and separation plate helps keep the controls cool. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: One-Touch™ Intuitive Kiln Control easily fires the bisque and glaze programs typically used in schools. It is also easy to adjust simple parameters like cone, delay, hold, heat-up and cool-down rates. Also four custom ramp/hold programs with 8 segments each.

Relays: Mercury free relays.

Thermocouples: Type K 8 gauge with ceramic protection tubes prevent metallic dusting in kiln and result in longer thermocouple life.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. In addition web videos show how to assemble the kiln and how to fire it. **(hotkilns.com/videos)**

FIVE YEAR WARRANTY

The School-Master Kiln Series was designed in conjunction with the One-Touch™ Intuitive Kiln Control specifically with busy school teachers in mind. One touch and you are ready to fire the bisque and glaze programs most often used in K-12 schools. No programming is necessary, simple adjustments are easy (like cone level, heating and cooling speed, hold time and delay time), yet sophisticated programming is also possible.

Warranty: Special Five-Year Limited Warranty. **(hotkilns.com/five-year-warranty)**

UL Listing: c-MET-us listed to UL499 standards.

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KILNS BUILT TO LAST

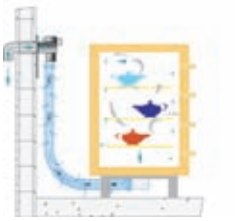
Bulletin No: SM-3-15

School-Master K-12 School Kilns

Options

Shelves are high alumina cone 11 shelves. See below for number, type (full or half), and dimensions. Each post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent-sure)**



Furniture kit for a SM23T-3 kiln.

Furniture kit for a SM28T-3 kiln.

Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Brick Thick	Furniture Kit	Furn. Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Wght Kiln Only	Ship Wght Kiln + Kit
SM23T	23-3/8"D x 27"H	7.0	2-1/2"	(2) 21" full, (4) 21" half	H-E-K23T/00	32" W x 40" H x 45" D	44" W x 61" H x 44" D	325 lbs	420 lbs
SM23T-3	22-3/8"D x 27"H	6.7	3"	(2) 20" full, (4) 20" half	H-E-K23T/30	32" W x 40" H x 45" D	44" W x 61" H x 44" D	360 lbs	455 lbs
SM28T-3	28"D x 27"H	10.2	3"	(8) 25-1/2" half	H-E-K28T/00	40" W x 41" H x 50" D	48" W x 61" H x 44" D	460 lbs	565 lbs

Minimum Space Requirements: Differs with each model. Refer to General Dimension Diagrams of the comparable Easy-Fire kilns.

Moving and installation: This comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.

General Dimension Drawings: PDFs of all General Dimension drawings can be downloaded from each model page on our web site.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Max Cone	Amps	Wire Size	Fuse Size
SM23T-240	K-S-23T2/31	240/1P	11,520	6	48.0	6 ga	60 Amps
SM23T-240-3P	K-S-23T2/32	240/3P	11,520	6	27.7	8 ga	40 Amps
SM23T-208	K-S-23T2/21	208/1P	9,980	6	48.0	6 ga	60 Amps
SM23T-208-3P	K-S-23T2/22	208/3P	11,000	6	30.5	8 ga	40 Amps
SM23T-3-240	K-S-23T3/31	240/1P	11,520	6	48.0	6 ga	60 Amps
SM23T-3-240-3P	K-S-23T3/32	240/3P	11,520	6	27.7	8 ga	40 Amps
SM23T-3-208	K-S-23T3/21	208/1P	9,980	6	48.0	6 ga	60 Amps
SM23T-3-208-3P	K-S-23T3/22	208/3P	11,000	6	30.5	8 ga	40 Amps
SM28T-3-240	K-S-28T3/31	240/1P	11,520	6	48.0	6 ga	60 Amps
SM28T-3-240-3P	K-S-28T3/32	240/3P	16,620	6	40.0	6 ga	40 Amps
SM28T-3-208	K-S-28T3/21	208/1P	9,980	5	48.0	6 ga	60 Amps
SM28T-3-208-3P	K-S-28T3/22	208/3P	14,340	6	39.8	6 ga	40 Amps

UL Listing: c-MET-us listed to UL499 standards.

Power connection: A six foot cord with a 50 amp NEMA 6-50 plug for single phase units or a 15-50 plug for 3 phase units is included. (No neutral is necessary). May be direct wired.

eQuad-Pro Series Production Kilns

Production Kilns • Cone 10 • Quad-Element Design

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that the loading is easy and unobstructed.

Hinge: Spring loaded for “feather-lite” easy opening.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Three to four 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws.

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Quad Element Design: Super Heavy-duty, thick elements with 4 rows of elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. This separation helps keep the controls cool. The control panel and element box are hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Two programs can be combined for one 16 segment program.

Zone Control: Three zones with three separate thermocouples.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Peephole Plugs: Three Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. In addition web videos show how to assemble the kiln and how to fire it. (**hotkilns.com/videos)**

The eQuad-Pro Series Kilns are designed to handle the rigorous demands of production firing. Utilizing a combination of L&L’s time proven technology, such as element holders, ceramic terminal boards, and thermocouple protection tubes, along with the new advancments of the super heavy-duty quad element holder and element design, this kiln series provides what is sure to be the preferred “workhorse” for any production studio.

Warranty: Limited 3 year warranty. (**hotkilns.com/warranty**).

UL Listing: Not Listed

L&L Kilns hotkilns.com
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sales@hotkilns.com • hotkilns.com

KILNS BUILT TO LAST

Bulletin No: EQ-3-15

eQuad-Pro Series Production Kilns

Options

Furniture/Shelves Kit: Shelves are cone 11 high alumina shelves. Each post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

KISS Software: Monitor and control kiln from your computer. Includes datalogging. **hotkilns.com/kiss**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Furniture kit for a eQ2327-3 kiln.

Furniture kit for a eQ2827-3 kiln.

Furniture kit for a eQ2836-3 kiln.

Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
eQ2327-3	22-3/8" Diam x 27" H	6.7	(2) full, (4) hall 20" shelves	H-J-K23X/30	31" W x 42" H x 42" D	44" W x 61" H x 44" D	365 lbs	485 lbs
eQ2827-3	28" Diam x 27" H	10.2	(8) 25-1/2" half shelves	H-J-K292/00	40" W x 41" H x 50" D	48" W x 61" H x 48" D	480 lbs	585 lbs
eQ2836-3	28" Diam x 36" H	13.6	(10) 25-1/2" half shelves	H-J-K293/00	40" W x 50" H x 50" D	48" W x 72" H x 48" D	595 lbs	725 lbs

Note: Vent and Furniture kit add 15" height to shipping dimensions of three ring kilns and must be placed on a separate skid for four ring kilns.

Minimum Space Requirements: Add 12" to outside dimensions.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Power Connection	Number of Zones
eQ2327-3-240	K-Q-2327/31	240/1P	13,440	56.0	4 ga	70 amps	Direct to Fused Disconnect	3
eQ2327-3-240-3P	K-Q-2327/32	240/3P	13,440	32.4	6 ga	50 amps	Direct to Fused Disconnect	3
eQ2327-3-208	K-Q-2327/21	208/1P	11,648	56.0	4 ga	70 amps	Direct to Fused Disconnect	3
eQ2327-3-208-3P	K-Q-2327/22	208/3P	11,648	32.4	6 ga	50 amps	Direct to Fused Disconnect	3
eQ2827-3-240	K-Q-2827/31	240/1P	14,950	62.3	3 ga	80 amps	Direct to Fused Disconnect	3
eQ2827-3-240-3P	K-Q-2827/32	240/3P	14,950	36.0	6 ga	50 amps	Direct to Fused Disconnect	3
eQ2827-3-208	K-Q-2827/21	208/1P	14,950	71.9	2 ga	90 amps	Direct to Fused Disconnect	3
eQ2827-3-208-3P	K-Q-2827/22	208/3P	14,950	41.5	6 ga	60 amps	Direct to Fused Disconnect	3
eQ2836-3-240	K-Q-2836/31	240/1P	19,000	79.2	1 ga	100 amps	Direct to Fused Disconnect	3
eQ2836-3-240-3P	K-Q-2836/32	240/3P	19,000	51.5	4 ga	70 amps	Direct to Fused Disconnect	3
eQ2836-3-208	K-Q-2836/21	208/1P	19,000	91.3	1/0	125 amps	Direct to Fused Disconnect	3
eQ2836-3-X-208	K-Q-283X/21	208/1P	16,640	80.0	1 ga	100 amps	Direct to Fused Disconnect	3
eQ2836-3-208-3P	K-Q-2836/22	208/3P	19,000	60.4	3 ga	80 amps	Direct to Fused Disconnect	3

UL Listing: Not Listed. **Power Connection:** Direct hook up to a fused disconnect switch.

Jupiter JD1800 & JD1800-3 Series

16.5/17.5” Diameter Sectional Kilns • Cone 10 • 2-1/2” or 3” Brick

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that loading is easy.

Hinge: The hinge of the JD1800 series is not spring-loaded. Chains are used to secure the lid in place when open.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two to three 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: Choice of 2-1/2” or 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 2 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that mounts to the element connection boxes. Cords from sections plug into this panel. The control panel is hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or three zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty**)

UL Listing: c-MET-us listed to UL499 standards.

A JD18-3 is shown with two sections.

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KILNS BUILT TO LAST

Bulletin No: JD18-3-15

Jupiter D1800 & JD1800-3 Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Apm Sintered Elements: Available as a special option. Increases element life in certain situations. **(hotkilns.com/apm)**

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 15" diamter for kilns with 3" brick and 15.5" diameter for kilns with 2.5" brick. Full and half round cordierite shelves. Each post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for a JD18

Furniture kit for a JD18X

Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
JD18	18"	2.6	1 full, 4 half shelves	H-J-K180/00	28" W x 31" H x 39" D	36" W x 55" H x 36" D	200 lbs	245 lbs
JD18X	27"	3.9	2 full, 4 half shelves	H-J-K18X/00	28" W x 40" H x 39" D	36" W x 60" H x 36" D	245 lbs	295 lbs
JD18-3	18"	2.5	1 full, 4 half shelves	H-J-K180/30	28" W x 32" H x 39" D	36" A x 55" H x 36" P	230 lbs	280 lbs
JD18X-3	27"	3.7	2 full, 4 half shelves	H-J-K18X/30	28" W x 41" H x 39" D	36" A x 60" H x 36" P	270 lbs	320 lbs

Crossection of Inside: 8 sided polygon, 16.5" in diameter for kilns with 3" brick and 17.5" diameter for kilns with 2-1/2" brick.

Minimum Space Requirements: 48" wide x 48" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Electrical Specifications

Standard Models						
Model Number	Part Number	Volt / Phase	Watts	Amps	Wire Size	Fuse Size
JD18-240	K-A-180H/31	240/1P	5,520	23.0	10 ga	30 a
JD18-240-3P	K-A-180H/32	240/3P	5,520	19.9	10 ga	30 a
JD18-208	K-A-180H/21	208/1P	5,520	26.5	10 ga	30 a
JD18-208-3P	K-A-180H/22	208/3P	5,520	23.0	10 ga	30 a
JD18X-240	K-A-18XH/31	240/1P	8,280	34.5	6 ga	50 a
JD18X-240-3P	K-A-18XH/32	240/3P	8,280	19.9	10 ga	30 a
JD18X-208	K-A-18XH/21	208/1P	8,280	39.8	6 ga	50 a
JD18X-208-3P	K-A-18XH/22	208/3P	8,280	23.0	10 ga	30 a

UL Listing: All the above models are c-MET-us listed.

Power Connection: Single phase models have a NEMA 6-50 plug. Three phase models have a NEMA 15-50 plug.

Jupiter JD2300 & JD2300-3 Series

22.5/23.5” Diameter Sectional Kilns • Cone 10 • 3” or 2-1/2” Brick

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C (except JD23V and JD23V-3 which are Cone 5)

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that loading is easy.

Hinge: Spring loaded for easy opening while still allowing lid to be supported without supports that get in the way of loading.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two to five 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: Choice of 2-1/2” or 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 2 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that mounts to the element connection boxes. Cords from sections plug into this panel. The control panel is hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two zones with separate thermocouples on the JD2918-3. Three zones with separate thermocouples on all other models.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty**)

UL Listing: c-MET-us listed to UL499 standards.

A JD230V is shown with three sections.

A JD245V is shown with five sections.

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KILNS BUILT TO LAST

Bulletin No: JD23-3-15

Jupiter JD2300 & JD2300-3 Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

INDUSTRIAL CONTROLS: Three zone Eurotherm control plus others. **(hotkilns.com/eurotherm3)** [Custom pricing]

480 VOLTS/3 PHASE: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

NEMA 1 CONTROL BOX: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Powered Bottom: Available on all JD2300 Series kilns. There is one extra element on the bottom. **(hotkilns.com/powered-bottoms-jupiter-kilns)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Apm Sintered Elements: Available as a special option. Increases element life in certain situations. **(hotkilns.com/apm)**

"Pull-Apart" Option For Sculpture: Includes floor mount stand for control panel, lift off lid with extra handles but no hinge. This option allows the entire kiln to be dismantled to make it easy to load large sculptural pieces. The kiln sections are unplugged and then taken off one at a time. **(hotkilns.com/pull-apart-kilns)**

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 20" diameter for kilns with 3" brick and 21" diameter for kilns with 2.5" brick. Full and half round cordierite shelves. Each post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for a J23V

Furniture kit for a J230V

Furniture kit for a J236V

Furniture kit for a J245V

Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
JD23V	18"	4.7	1 full, 4 half shelves	H-J-K230/00	32" W x 31" H x 45" D	44" W x 55" H x 44" D	275 lbs	350 lbs
JD230V	27"	7.0	2 full, 4 half shelves	H-J-K23X/00	32" W x 40" H x 45" D	44" W x 60" H x 44" D	330 lbs	425 lbs
JD236V	36"	9.4	3 full, 4 half shelves	H-J-K236/00	32" W x 49" H x 45" D	44" W x 63" H x 44" D and 36" W x 20" H x 36" D	360 lbs	455 lbs
JD245V	45"	11.8	4 full, 4 half shelves	H-J-K245/00	32" W x 58" H x 45" D	44" W x 60" H x 44" D and 44" W x 38" H 44" D	445 lbs	560 lbs
JD23V-3	18"	4.5	1 full, 4 half shelves	H-J-K230/30	32" W x 32" H x 45" D	44" W x 55" H x 44 " D	315 lbs	340 lbs
JD230V-3	27"	6.7	2 full, 4 half shelves	H-J-K23X/30	32" W x 41" H x 45" D	44" W x 60" H x 44" D	385 lbs	470 lbs
JD236V-3	36"	8.9	3 full, 4 half shelves	H-J-K236/30	32" W x 50" H x 45" D	44" W x 63" H x 44" D and 36" W x 20" H x 36" D	460 lbs	545 lbs
JD245V-3	45"	11.1	4 full, 4 half shelves	H-J-K245/30	32" W x 59" H x 45" D	44" W x 60" H x 44" D and 44" W x 38" H x 44" D	540 lbs	650 lbs

Crossection of Inside: 10 sided polygon, 22" in diameter for kilns with 3: brick and 23.5" for kilns with 2-1/2" brick.

Minimum Space Requirements: 54" wide x 52-1/2" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Jupiter JD2300 & JD2300-3 Series

Electrical Specifications

Standard Models							Powered Bottom Models					
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Model Number	Part Number	Watts	Amps	Wire Size	Fuse Size
JD23V-240	K-A-230H/31	240/1P	7,036	29.3	8 ga	40 a	JD23V-PB-240	K-A-230P/31	8,800	36.6	6 ga	50 a
JD23V-240-3P	K-A-230H/32	240/3P	7,036	25.4	8 ga	40 a	JD23V-PB-240-3P	K-A-230P/32	8,800	25.4	8 ga	40 a
JD23V-208	K-A-230H/21	208/1P	6,096	29.3	8 ga	40 a	JD23V-PB-208	K-A-230P/21	7,620	36.6	6 ga	50 a
JD23V-208-3P	K-A-230H/22	208/3P	6,096	25.4	8 ga	40 a	JD23V-PB-208-3P	K-A-230P/22	7,620	25.4	8 ga	40 a
JD230V-240	K-A-231H/31	240/1P	10,554	44.0	6 ga	60 a	JD230V-PB-240	K-A-231P/31	12,300	51.3	4 ga	70 a
JD230V-240-3P	K-A-231H/32	240/3P	10,554	25.4	8 ga	40 a	JD230V-PB-240-3P	K-A-231P/32	12,300	31.7	6 ga	50 a
JD230V-208	K-A-231H/21	208/1P	9,144	44.0	6 ga	60 a	JD230V-PB-208	K-A-231P/21	10,700	51.3	4 ga	70 a
JD230V-208-3P	K-A-231H/22	208/3P	9,144	25.4	8 ga	40 a	JD230V-PB-208-3P	K-A-231P/22	10,700	31.7	6 ga	50 a
JD236V-240	K-A-236H/31	240/1P	14,072	58.6	3 ga	80 a	JD236V-PB-240	K-A-236P/31	15,800	65.9	2 ga	90 a
JD236V-240-3P	K-A-236H/32	240/3P	14,072	38.1	6 ga	50 a	JD236V-PB-240-3P	K-A-236P/32	15,800	44.4	6 ga	60 a
JD236V-208	K-A-236H/21	208/1P	12,192	58.6	3 ga	80 a	JD236V-PB-208	K-A-236P/21	13,700	65.9	2 ga	90 a
JD236V-208-3P	K-A-236H/22	208/3P	12,192	38.1	6 ga	50 a	JD236V-PB-208-3P	K-A-236P/22	13,700	44.4	6 ga	60 a
JD245V-240	K-A-245H/31	240/1P	17,590	73.3	1 ga	100 a	JD245V-PB-240	K-A-245P/31	19,400	80.6	1 ga	100 a
JD245V-240-3P	K-A-245H/32	240/3P	17,590	50.8	4 ga	70 a	JD245V-PB-240-3P	K-A-245P/32	19,400	50.8	4 ga	70 a
JD245V-208	K-A-245H/21	208/1P	15,240	73.3	1 ga	100 a	JD245V-PB-208	K-A-245P/21	16,800	80.6	1 ga	100 a
JD245V-208-3P	K-A-245H/22	208/3P	15,240	50.8	4 ga	70 a	JD245V-PB-208-3P	K-A-245P/22	16,800	50.8	4 ga	70 a

Extra Power: Extra wattage and amperage can be achieved through the use of Easy-Fire elements on Jupiter kilns at no extra charge.

Cone/Temperature Rating: Cone 10, 2350°F, 1290°C (except JD23V which is rated for Cone 5, 2165°F, 1185°C)

UL Listing: All the above models are c-MET-us listed.

Power Connection: Single phase models up to 48 amps have a NEMA 6-50 plug. Three phase models up to 48 amps have a NEMA 15-50 plug. All other models are direct wire to a fused disconnect switch.

Jupiter JD2900-3 Series

29” Diameter Sectional Kilns • Cone 10 (most models) • 3” Brick

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C (except JD2918-3 which is Cone 5)

Loading: Lid position, when open, rests at an angle away from the kiln without lid supports so that loading is easy.

Hinge: Spring loaded for easy opening while still allowing lid to be supported without supports that get in the way of loading.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two to five 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 3 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that mounts to the element connection boxes. Cords from sections plug into this panel. The control panel is hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two zones with separate thermocouples on the JD2918-3. Three zones with separate thermocouples on all other models.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty**)

UL Listing: c-MET-us listed to UL499 standards.

A JD2927-3 is shown with three sections.

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KILNS BUILT TO LAST

Bulletin No: JD29-3-15

Jupiter JD2900-3 Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

INDUSTRIAL CONTROLS: Three zone Eurotherm control plus others. **(hotkilns.com/eurotherm3)** [Custom pricing]

480 VOLTS/3 PHASE: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

NEMA 1 CONTROL BOX: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Powered Bottom: Available on all JD2900 Series kilns. There are two extra elements. **(hotkilns.com/powered-bottoms-jupiter-kilns)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Apm Sintered Elements: Available as a special option. Increases element life in certain situations. **(hotkilns.com/apm)**

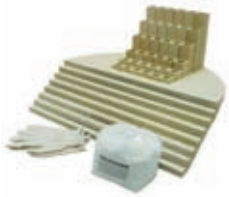
Bell-Lift: Bell-lift system available with a manual or electric winch. **(hotkilns.com/bell-lift-28)**

"Pull-Apart" Option For Sculpture: Includes floor mount stand for control panel, lift off lid with extra handles but no hinge. This option allows the entire kiln to be dismantled to make it easy to load large sculptural pieces. The kiln sections are unplugged and then taken off one at a time. **(hotkilns.com/pull-apart-kilns)**

Furniture Kits

Shelves are high alumina cone 11 shelves. They are all half shelves 25.5" in diameter Each post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for a JD2918-3



Furniture kit for a JD2927-3

Furniture kit for a JD2936-3

Furniture kit for a JD2945-3

Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
JD2918-3	18"	6.8	6 shelves	H-J-K290/00	40" W x 32" H x 50" D	48" W x 55" H x 44" D	380 lbs	480 lbs
JD2927-3	27"	10.2	8 shelves	H-J-K292/00	40" W x 41" H x 50" D	48" W x 60" H x 44" D	450 lbs	575 lbs
JD2936-3	36"	13.6	10 shelves	H-J-K293/00	40" W x 50" H x 50" D	48" W x 63" H x 44" D and 36" W x 20" H x 36" D	565 lbs	715 lbs
JD2945-3	45"	17	12 shelves	H-J-K294/00	40" W x 59" H x 50" D	48" W x 60" H x 44" D and 48" W x 38" H x 44" D	645 lbs	820 lbs

Crossection of Inside: 12 sided polygon, 28" in diameter.

Minimum Space Requirements: 58" wide x 58" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

Electrical Specifications

Standard Models							Powered Bottom Models					
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Model Number	Part Number	Watts	Amps	Wire Size	Fuse Size
JD2918-3-240	K-A-291D/31	240/1P	9,120	38.0	6 ga	50 a	JD2918-3-PB-240	K-A-291B/31	12,160	50.7	4 ga	70 a
JD2918-3-240-3P	K-A-291D/32	240/3P	9,120	32.9	6 ga	50 a	JD2918-3-PB-240-3P	K-A-291B/32	12,160	32.9	6 ga	50 a
JD2918-3-208	K-A-291D/21	208/1P	8,320	40.0	6 ga	50 a	JD2918-3-PB-208	K-A-291B/21	11,093	53.3	4 ga	70 a
JD2918-3-208-3P	K-A-291D/22	208/3P	8,320	34.6	6 ga	50 a	JD2918-3-PB-208-3P	K-A-291B/22	11,093	34.6	6 ga	50 a
JD2927-3-240	K-A-292D/31	240/1P	13,680	57.0	3 ga	80 a	JD2927-3-PB-240	K-A-292B/31	16,720	69.7	2 ga	90 a
JD2927-3-240-3P	K-A-292D/32	240/3P	13,680	32.9	6 ga	50 a	JD2927-3-PB-240-3P	K-A-292B/32	16,720	43.9	6 ga	60 a
JD2927-3-208	K-A-292D/21	208/1P	12,480	60.0	3 ga	80 a	JD2927-3-PB-208	K-A-292B/21	15,250	73.3	2 ga	90 a
JD2927-3-208-3P	K-A-292D/22	208/3P	12,480	34.6	6 ga	50 a	JD2927-3-PB-208-3P	K-A-292B/22	15,250	46.2	6 ga	60 a
JD2936-3-240	K-A-293D/31	240/1P	18,240	76.0	1 ga	100 a	JD2936-3-PB-240	K-A-293B/31	21,280	88.7	1/0	125 a
JD2936-3-240-3P	K-A-293D/32	240/3P	18,240	49.3	4 ga	70 a	JD2936-3-PB-240-3P	K-A-293B/32	21,280	60.3	3 ga	80 a
JD2936-3-208	K-A-293D/21	208/1P	16,640	80.0	1 ga	100 a	JD2936-3-PB-208	K-A-293B/21	19,413	93.3	1/0	125 a
JD2936-3-208-3P	K-A-293D/22	208/3P	16,640	52.0	4 ga	70 a	JD2936-3-PB-208-3P	K-A-293B/22	19,413	63.5	3 ga	80 a
JD2945-3-240	K-A-294D/31	240/1P	22,800	95.0	1/0	125 a	JD2945-3-PB-240	K-A-294B/31	25,840	107.7	2/0	150 a
JD2945-3-240-3P	K-A-294D/32	240/3P	22,800	65.8	2 ga	90 a	JD2945-3-PB-240-3P	K-A-294B/32	25,840	65.8	2 ga	90 a
JD2945-3-208	K-A-294D/21	208/1P	20,800	100.0	1/0	125 a	JD2945-3-PB-208	K-A-294B/21	23,573	113.3	2/0	150 a
JD2945-3-208-3P	K-A-294D/22	208/3P	20,800	69.3	2 ga	90 a	JD2945-3-PB-208-3P	K-A-294B/22	23,573	69.3	2 ga	90 a

Cone/Temperature Rating: Cone 10, 2350°F, 1290°C (except JD2918-3 which is rated for Cone 5, 2165°F, 1185°C)

UL Listing: All models are c-MET-us listed. 480 models are c-MET-us listed as long as a NEMA1 panel is used.

480 Volt Electrical Requirements: See hotkilns.com/480.html.

Power Connection: Direct hook up to fused disconnect switch.

DaVinci X2300-D Series

22” x 22” Square Sectional Kilns • Cone 10 • 3” Brick

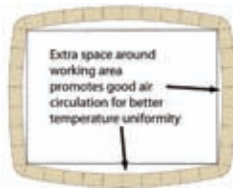
Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Lid, Hinge & Stand: Counterbalanced lid system with springs and safety latch. Angle iron structural stand with aluminized sheet. Powder coated blue. Includes leveling bolts.

Assembly: 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Loading/Adjustment feature: It is possible to lift top section(s) off of the X2336-D and X2345-D without disassembling kiln. **(hotkilns.com/sectional-kiln-davinci)**



Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation around kiln shelves. **(hotkilns.com/arched-sides)**

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 3 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: Floor mounted & separate. Sections plug into panel with 50 amp cords. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access and is made of aluminized steel. An On/off switch and control fuse are included. Direct electrical hook-up to terminal block. Some voltage kilns have a floor mounted panel and some have a smaller panel mounte don the kiln off the element boxes like Jupiter kilns.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or Three Zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

An XB2318-D is shown with two sections. The control panel is mounted on the right side of the kiln.

This shows the spring hinge system in the back

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KILNS BUILT TO LAST

Bulletin No: X23-3-15

DaVinci X2300-D Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Industrial Controls: Three zone Eurotherm control plus others. **(hotkilns.com/eurotherm3)**

480 Volts/3 Phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

Nema 1 Control Box: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

High Power Option: The X2327-D, X2336-D, & X2345-D can be ordered with extra power. (XB Models)

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 10" x 20" x 3/4". See below for quantity. Each post kit includes six each, 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for an X2327-D

Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
XB2318-D	18"	5.0	4 shelves, 1 post kit	H-X-K318/00	40" W x 32" H x 42" D	1 crate: 44" W x 45" H x 44" D 1 crate: 44" W x 74" H x 44" D	600 lbs	646 lbs
X2327-D	27"	8.1	6 shelves, 1 post kit	H-X-K327/00	40" W x 41" H x 42" D	1 crate: 44" W x 54" H x 44" D 1 crate: 44" W x 84" H x 44" D	700 lbs	764 lbs
X2336-D	36"	10.8	8 shelves, 2 post kits	H-X-K336/00	40" W x 50" H x 42" D	1 crate: 44" W x 63" H x 44" D 1 crate: 44" W x 84" H x 44" D	775 lbs	867 lbs
X2345-D	45"	13.5	10 shelves, 2 post kits	H-X-K345/00	40" W x 59" H x 42" D	1 crate: 44" W x 48" H x 44" D 1 crate: 44" W x 36" H x 44" D 1 crate: 44" W x 84" H x 44" D	875 lbs	985 lbs

Crossection of Inside: 22" wide by 22" deep.

Minimum Space Requirements: 54" wide by 54" deep, or 59" wide by 59" deep for the X2345-D.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

For all dimensions and weights: See hotkilns.com/davinci-dimensions.pdf.

DaVinci X2300-D Series

Electrical Specifications

Standard Models						
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
XB2318-D-240	K-X-B238/31	240/1P	8,932	37.2	6 ga	50 a
XB2318-D-240-3P	K-X-B238/32	240/3P	8,932	32.2	8 ga	40 a
XB2318-D-208	K-X-B238/21	208/1P	8,932	42.9	6 ga	60 a
XB2318-D-208-3P	K-X-B238/22	208/3P	8,932	37.2	6 ga	50 a
X2327-D-240	K-X-2327/31	240/1P	11,704	48.8	6 ga	60 a
X2327-D-240-3P	K-X-2327/32	240/3P	11,704	28.2	8 ga	40 a
X2327-D-208	K-X-2327/21	208/1P	11,704	56.3	4 ga	70 a
X2327-D-208-3P	K-X-2327/22	208/3P	11,704	32.5	8 ga	40 a
X2336-D-240	K-X-2336/31	240/1P	15,604	65.0	3 ga	80 a
X2336-D-240-3P	K-X-2336/32	240/3P	15,604	42.2	6 ga	60 a
X2336-D-208	K-X-2336/21	208/1P	15,604	75.0	2 ga	90 a
X2336-D-208-3P	K-X-2336/22	208/3P	15,604	48.7	6 ga	60 a
X2345-D-240	K-X-2345/31	240/1P	19,505	81.3	1 ga	100 a
X2345-D-240-3P	K-X-2345/32	240/3P	19,505	56.3	4 ga	40 a
X2345-D-208	K-X-2345/21	208/1P	19,505	93.8	1/0	125 a
X2345-D-208-3P	K-X-2345/22	208/3P	19,505	65.0	3 ga	80 a

UL Listing: All models are c-MET-us listed. 480 models are c-MET-us listed as long as a NEMA1 panel is used.

480 Volt Electrical Requirements: See hotkilns.com/davinci-electric.pdf.

High Powered Option Electrical Requirements: This is available for the X2827-D, X2836-D, X2845-D. It increases KW ratings by about 20%. See hotkilns.com/davinci-electric.pdf.

DaVinci X2800-D Series

26-1/2” x 26-1/2” Square Sectional Kilns • Cone 10 • 3” Brick

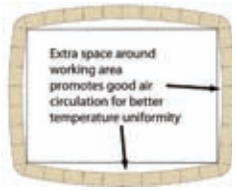
Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Lid, Hinge & Stand: Counterbalanced lid system with springs and safety latch. Angle iron structural stand with aluminized sheet. Powder coated blue. Includes leveling bolts.

Assembly: 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Loading/Adjustment feature: It is possible to lift top section(s) off of the X2836-D and X2845-D without disassembling kiln. **(hotkilns.com/sectional-kiln-davinci)**



Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation around kiln shelves. **(hotkilns.com/arched-sides)**

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 3 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: Floor mounted & separate. Sections plug into panel with 50 amp cords. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access and is made of aluminized steel. An On/off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or Three Zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

An X2827-D is shown with three sections. The control panel is mounted on the right side of the kiln.

This shows the spring hinge system in the back

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KILNS BUILT TO LAST

Bulletin No: X28-3-15

DaVinci X2800-D Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Industrial Controls: Three zone Eurotherm control plus others. **(hotkilns.com/eurotherm3)**

480 Volts/3 Phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

Nema 1 Control Box: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Powered Bottom: Available on all X2800 Series kilns. **(hotkilns.com/powered-bottoms-davinci-kilns)**

High Power Option: The X2827-D, X2836-D, & X2845-D can be ordered with extra power. (XB Models)

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 11-1/2" x 23" x 3/4". See below for quantity. Each post kit includes six each, 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for an X2827

Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
XB2818-D	18"	7.8	4 shelves, 1 post kit	H-X-K818/00	45" W x 32" H x 43" D	1 crate: 48" W x 45" H x 44" D 1 crate: 48" W x 74" H x 44" D	725 lbs	795 lbs
X2827-D	27"	11.7	6 shelves, 1 post kit	H-X-K827/00	45" W x 41" H x 43" D	1 crate: 48" W x 54" H x 44" D 1 crate: 48" W x 84" H x 44" D	835 lbs	935 lbs
X2836-D	36"	15.6	8 shelves, 2 post kits	H-X-K836/00	45" W x 50" H x 43" D	1 crate: 48" W x 63" H x 44" D 1 crate: 48" W x 84" H x 44" D	935 lbs	1075 lbs
X2845-D	45"	19.5	10 shelves, 2 post kits	H-X-K845/00	45" W x 59" H x 43" D	1 crate: 48" W x 48" H x 44" D 1 crate: 48" W x 36" H x 44" D 1 crate: 48" W x 84" H x 44" D	1050 lbs	1220 lbs

Crossection of Inside: 26-1/2" wide by 26-1/2" deep.

Minimum Space Requirements: 64" wide by 64" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

DaVinci X2800-D Series

Electrical Specifications

Standard Models							Powered Bottom Models				
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Part Number	Watts	Amps	Wire Size	Fuse Size
XB2818-D-240	K-X-B288/31	240/1P	11,592	48.3	6 ga	60 a	K-X-281P/31	15,500	64.4	3 ga	80 a
XB2818-D-240-3P	K-X-B288/32	240/3P	11,592	41.8	6 ga	60 a	K-X-281P/32	15,500	41.8	6 ga	60 a
XB2818-D-208	K-X-B288/21	208/1P	11,592	55.7	4 ga	70 a	K-X-281P/21	15,500	74.3	2 ga	90 a
XB2818-D-208-3P	K-X-B288/22	208/3P	11,592	48.3	6 ga	60 a	K-X-281P/22	15,500	48.3	6 ga	60 a
X2827-D-240	K-X-2827/31	240/1P	14,930	62.2	3 ga	80 a	K-X-282P/31	18,300	76.1	2 ga	90 a
X2827-D-240-3P	K-X-2827/32	240/3P	14,930	35.9	6 ga	50 a	K-X-282P/32	18,300	47.9	4 ga	70 a
X2827-D-208	K-X-2827/21	208/1P	14,930	71.8	2 ga	90 a	K-X-282P/21	18,300	87.7	1 ga	100 a
X2827-D-208-3P	K-X-2827/22	208/3P	14,930	41.5	6 ga	60 a	K-X-282P/22	18,300	55.3	4 ga	70 a
X2836-D-240	K-X-2836/31	240/1P	19,907	83.0	1 ga	100 a	K-X-283P/31	23,200	96.8	1/0	125 a
X2836-D-240-3P	K-X-2836/32	240/3P	19,907	53.9	4 ga	70 a	K-X-283P/32	23,200	65.9	3 ga	80 a
X2836-D-208	K-X-2836/21	208/1P	19,907	95.7	1/0	125 a	K-X-283P/21	23,200	111.7	1/0	125 a
X2836-D-208-3P	K-X-2836/22	208/3P	19,907	62.2	6 ga	80 a	K-X-283P/22	23,200	76.0	2 ga	90 a
X2845-D-240	K-X2845/31	240/1P	24,883	103.7	1/0	125 a	K-X284P/31	28,200	117.5	2/0	150 a
X2845-D-240-3P	K-X2845/32	240/3P	24,883	71.9	2 ga	90 a	K-X284P/32	28,200	71.9	2 ga	90 a
X2845-D-208	K-X2845/21	208/1P	24,883	119.6	2/0	150 a	K-X284P/21	28,200	135.6	2/0	150 a
X2845-D-208-3P	K-X2845/22	208/3P	24,883	82.9	1 ga	100 a	K-X284P/22	28,200	82.9	1 ga	100 a

For Model Number Powered Bottom Model: Add a “PB” after the “D” (Example = X2827-D-PB-240-1).

UL Listing: All models are c-MET-us listed. 480 models are c-MET-us listed as long as a NEMA1 panel is used.

480 Volt Electrical Requirements: See hotkilns.com/davinci-electric.pdf.

High Powered Option Electrical Requirements: This is available for the X2827-D, X2836-D, X2845-D. It increases KW ratings by about 20%. See hotkilns.com/davinci-electric.pdf.

DaVinci X3200-D Series

30-1/2” x 30-1/2” Square Sectional Kilns • Cone 10 • 3” Brick

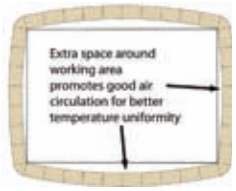
Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Lid, Hinge & Stand: Counterbalanced lid system with springs and safety latch. Angle iron structural stand with aluminized sheet. Powder coated blue. Includes leveling bolts.

Assembly: 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Loading/Adjustment feature: It is possible to lift top section(s) off of the X2836-D and X2845-D without disassembling kiln. **(hotkilns.com/sectional-kiln-davinci)**



Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation around kiln shelves. **(hotkilns.com/arched-sides)**

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 3 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: Floor mounted & separate. Sections plug into panel with 50 amp cords. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access and is made of aluminized steel. An On/off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or Three Zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

An X3236-D is shown with four sections. The control panel is mounted on the right side of the kiln.

This shows the spring hinge system in the back

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Bulletin No: X32-3-15

DaVinci X3200-D Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Industrial Controls: Three zone Eurotherm control plus others. **(hotkilns.com/ eurotherm3)**

480 Volts/3 Phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

Nema 1 Control Box: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Powered Bottom: Available on all X3200 Series kilns. **(hotkilns.com/powered-bottoms-davinci-kilns)**

High Power Option: The X3227-D, X3236-D, & X3245-D can be ordered with extra power. (XB Models)

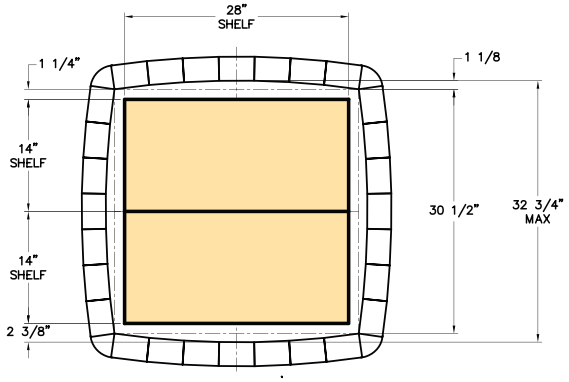
Bell-Lift: Bell-lift system available with a manual or electric winch. **(hotkilns.com/davinci-bell-lift-kilns)**

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 14" x 28" x 3/4". See below for quantity. Each post kit includes six each, 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for an X3227-D.

Crossection



Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
XB3218-D	18"	10.0	4 shelves, 1 post kit	H-X-K218/00	49" W x 32" H x 49" D	1 crate: 54" W x 45" H x 48" D 1 crate: 48" W x 74" H x 44" D	880 lbs	982 lbs
X3227-D	27"	15.0	6 shelves, 1 post kit	H-X-K227/00	49" W x 41" H x 49" D	1 crate: 54" W x 54" H x 48" D 1 crate: 48" W x 84" H x 44" D	1000 lbs	1148 lbs
X3236-D	36"	20.0	8 shelves, 2 post kit	H-X-K236/00	49" W x 50" H x 49" D	1 crate: 54" W x 48" H x 63" D 1 crate: 48" W x 84" H x 44" D	1135lbs	1339 lbs
X3245-D	45"	25.0	10 shelves, 2 post kits	H-X-K245/00	49" W x 59" H x 49" D	1 crate: 54" W x 48" H x 48" D 1 crate: 54" W x 36" H x 48" D 1 crate: 48" W x 84" H x 44" D	1275 lbs	1525 lbs

Crossection of Inside: 30-1/2" wide by 30-1/2" deep.

Minimum Space Requirements: 64" wide by 64" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

DaVinci X3200-D Series

Electrical Specifications

Standard Models							Powered Bottom Models				
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Part Number	Watts	Amps	Wire Size	Fuse Size
XB3218-D-240	K-X-B328/31	240/1P	14,196	59.2	3 ga	80 a	K-X-321P/31	18,928	78.9	1 ga	100 a
XB3218-D-240-3P	K-X-B328/32	240/3P	14,196	51.2	4 ga	70 a	K-X-321P/32	18,928	51.2	4 ga	70 a
XB3218-D-208	K-X-B328/21	208/1P	14,196	68.3	2 ga	90 a	K-X-321P/21	18,928	91.0	1/0	125 a
XB3218-D-208-3P	K-X-B328/22	208/3P	14,196	59.1	3 ga	80 a	K-X-321P/22	18,928	59.1	3 ga	80 a
X3227-D-240	K-X-3227/31	240/1P	18,039	75.2	1 ga	100 a	K-X-322P/31	22,050	91.9	1/0	125 a
X3227-D-240-3P	K-X-3227/32	240/3P	18,039	43.4	6 ga	60 a	K-X-322P/32	22,050	57.9	3 ga	80 a
X3227-D-208	K-X-3227/21	208/1P	18,039	86.7	1/0	125 a	K-X-322P/21	22,050	106.0	1/0	125 a
X3227-D-208-3P	K-X-3227/22	208/3P	18,039	50.1	4 ga	70 a	K-X-322P/22	22,050	66.8	2 ga	90 a
X3236-D-240	K-X-3236/31	240/1P	24,412	101.7	1/0	125 a	K-X-323P/31	28,060	116.9	2/0	150 a
X3236-D-240-3P	K-X-3236/32	240/3P	24,412	65.1	3 ga	80 a	K-X-323P/32	28,060	79.6	1 ga	100 a
X3236-D-208	K-X-3236/21	208/1P	24,412	117.4	2/0	150 a	K-X-323P/21	28,060	134.9	2/0	150 a
X3236-D-208-3P	K-X-3236/22	208/3P	24,412	75.1	1 ga	100 a	K-X-323P/22	28,060	91.8	1/0	125 a
X3245-D-240	K-X3245/31	240/1P	30,515	127.2	4/0	175 a	K-X324P/31	34,074	142.0	4/0	175 a
X3245-D-240-3P	K-X3245/32	240/3P	30,515	86.8	1/0	125 a	K-X324P/32	34,074	86.8	1 ga	100 a
X3245-D-208	K-X3245/21	208/1P	30,515	146.7	250 mcm	200 a	K-X324P/21	34,074	163.8	250 mcm	200 a
X3245-D-208-3P	K-X3245/22	208/3P	30,515	100.2	1/0	125 a	K-X324P/22	34,074	100.2	1/0	125 a

For Model Number Powered Bottom Model: Add a “PB” after the “D” (Example = X3227-D-PB-240-1).

480 Volt Electrical Requirements: See hotkilns.com/davinci-electric.pdf.

High Powered Option Electrical Requirements: This is available for the X3227-D, X3236-D, X3245-D. It increases KW ratings by about 20%. See hotkilns.com/davinci-electric.pdf.

DaVinci T2300-D Series

35-1/4” x 26-1/2” Rectangular Sectional Kilns • Cone 10 • 3” Brick

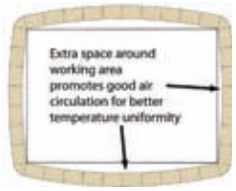
Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Lid, Hinge & Stand: Counterbalanced lid system with springs and safety latch. Angle iron structural stand with aluminized sheet. Powder coated blue. Includes leveling bolts.

Assembly: 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Loading/Adjustment feature: It is possible to lift top section(s) off of the T2336-D and T2345-D without disassembling kiln. **(hotkilns.com/sectional-kiln-davinci)**



Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation around kiln shelves. **(hotkilns.com/arched-sides)**

Insulation: 3” K23 firebrick.

Brick Coating: Reflective coating protects brick and reduces dusting.

Element Holders: Patented ceramic holders protect brick.

Elements: Heavy-duty. 3 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: Floor mounted & separate. Sections plug into panel with 50 amp cords. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access and is made of aluminized steel. An On/off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or Three Zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

This shows the spring hinge system in the back

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KILNS BUILT TO LAST

Bulletin No: T23-3-15

DaVinci T2300-D Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Industrial Controls: Three zone Eurotherm control plus others. **(hotkilns.com/eurotherm3)**

480 Volts/3 Phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

Nema 1 Control Box: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Powered Bottom: Available on all T2300 Series kilns. **(hotkilns.com/powered-bottoms-davinci-kilns)**

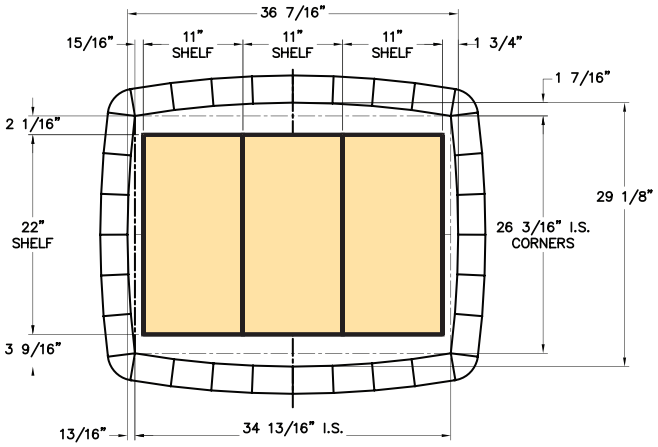
High Power Option: The T2327-D, T2336-D, & T2345-D can be ordered with extra power. (TB Models)

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 11" x 22" x 3/4". See below for quantity. Each post kit includes six 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include, heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for an T2327-D

Crossection



Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
TB2318-D	18"	9.7	6 shelves, 1 post kit	H-T-K418/00	54" W x 32" H x 43" D	1 crate: 62" W x 45" H x 48" D 1 crate: 50" W x 74" H x 44" D	900 lbs	994 lbs
T2327-D	27"	14.6	9 shelves, 1 post kit	H-T-K427/00	54" W x 41" H x 43" D	1 crate: 62" W x 54" H x 48" D 1 crate: 50" W x 84" H x 44" D	1035 lbs	1171 lbs
T2336-D	36"	19.4	12 shelves, 2 post kit	H-T-K436/00	54" W x 50" H x 43" D	1 crate: 62" W x 63" H x 48" D 1 crate: 50" W x 84" H x 44" D	1165 lbs	1353 lbs
T2345-D	45"	24.3	15 shelves, 2 post kits	H-T-K445/00	54" W x 59" H x 43" D	1 crate: 62" W x 48" H x 48" D 1 crate: 62" W x 36" H x 48" D 1 crate: 50" W x 84" H x 44" D	1300 lbs	1530 lbs

Crossection of Inside: 34-3/4" wide by 26-1/4" deep.

Minimum Space Requirements: 77" wide by 64" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings.

DaVinci T2300-D Series

Electrical Specifications

Standard Models							Powered Bottom Models				
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Part Number	Watts	Amps	Wire Size	Fuse Size
TB2318-D-240	K-T-2318/31	240/1P	15,341	63.9	3 ga	80 a	K-T-231P/31	20,500	85.2	1 ga	100 a
TB2318-D-240-3P	K-T-2318/32	240/3P	15,341	55.4	4 ga	70 a	K-T-2318P/32	20,500	55.4	4 ga	70 a
TB2318-D-208	K-T-2318/21	208/1P	15,341	73.8	1 ga	100 a	K-T-231P/21	20,500	98.3	1/0	125 a
TB2318-D-208-3P	K-T-2318/22	208/3P	15,341	63.9	3 ga	80 a	K-T-231P/22	20,500	63.9	3 ga	80 a
T2327-D-240	K-T-2327/31	240/1P	19,510	81.3	1 ga	100 a	K-T-232P/31	23,840	99.4	1/0	125 a
T2327-D-240-3P	K-T-2327/32	240/3P	19,510	46.9	6 ga	60 a	K-T-232P/32	23,840	62.6	3 ga	80 a
T2327-D-208	K-T-2327/21	208/1P	19,510	93.8	1/0	125 a	K-T-232P/21	23,840	114.6	2/0	150 a
T2327-D-208-3P	K-T-2327/22	208/3P	19,510	54.1	4 ga	70 a	K-T-232P/22	23,840	72.2	2 ga	90 a
T2336-D-240	K-T-2336/31	240/1P	26,013	108.4	1/0	125 a	K-T-233P/31	30,400	126.5	2/0	150 a
T2336-D-240-3P	K-T-2336/32	240/3P	26,013	70.4	2 ga	90 a	K-T-233P/32	30,400	86.0	1 ga	100 a
T2336-D-208	K-T-2336/21	208/1P	26,013	125.1	2/0	150 a	K-T-233P/21	30,400	145.9	4/0	175 a
T2336-D-208-3P	K-T-2336/22	208/3P	26,013	81.2	1 ga	100 a	K-T-233P/22	30,400	99.3	1/0	125 a
T2345-D-240	K-T-2345/31	240/1P	32,517	135.4	4/0	175 a	K-T-234P/31	36,900	153.5	250 mcm	200 a
T2345-D-240-3P	K-T-2345/32	240/3P	32,517	93.9	1/0	125 a	K-T-234P/32	36,900	93.9	1/0	125 a
T2345-D-208	K-T-2345/21	208/1P	32,517	156.3	250 mcm	200 a	K-T-234P/21	36,900	177.2	250 mcm	200 a
T2345-D-208-3P	K-T-2345/22	208/3P	32,517	108.3	1/0	125 a	K-T-234P/22	36,900	108.3	1/0	125 a

For Model Number Powered Bottom Model: Add a “PB” after the “D” (Example = T2336-D-PB-240-1).

UL Listing: All models are c-MET-us listed. 480 models are c-MET-us listed as long as a NEMA1 panel is used.

480 Volt Electrical Requirements: See hotkilns.com/davinci-electric.pdf.

High Powered Option Electrical Requirements: This is available for the T2327-D, T2336-D, T2345-D. It increases KW ratings by about 20%. See hotkilns.com/davinci-electric.pdf.

DaVinci T3400-D Series

43-1/2” x 30-1/2” Rectangular Sectional Kilns • Cone 10 • 3” Brick

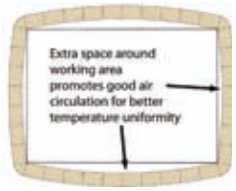
Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Lid, Hinge & Stand: Counterbalanced lid system with springs and safety latch. Angle iron structural stand with aluminized sheet. Powder coated blue. Includes leveling bolts.

Assembly: 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Loading/Adjustment feature: It is possible to lift top section(s) off of the T3436-D and T3445-D without disassembling kiln. **(hotkilns.com/sectional-kiln-davinci)**



Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation around kiln shelves. **(hotkilns.com/arched-sides)**

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 3 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: Floor mounted & separate. Sections plug into panel with 50 amp cords. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access and is made of aluminized steel. An On/off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or Three Zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

An T3436-D is shown with four sections.

This shows the spring hinge system in the back

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KILNS BUILT TO LAST

Bulletin No: T34-3-15

DaVinci T3400-D Series

Options

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Industrial Controls: Three zone Eurotherm control plus others. **(hotkilns.com/ eurotherm3)**

480 Volts/3 Phase: (needs NEMA1 panel for MET-us listing) (sections hard wired to power box) **(hotkilns.com/480)**

Nema 1 Control Box: for industrial use (480 volts becomes MET-us listed with this extra option)

Kiss Software: Monitor and control kiln remotely. For the DynaTrol only. **(hotkilns.com/kiss)**

High Limit Back Up Control (latching relay back up control system) **(hotkilns.com/high-limit)**:

Back Up Contactors (actuated by the High Limit Back Up Digital Control, needs a large box) **(hotkilns.com/high-limit)**

120 Volt Power Supply: with EMI electrical noise filter **(hotkilns.com/noise)**

Quad Element Option: Four rows of elements for each 9" kiln section. For maximum high-fire element life. (The combination of larger coil diameter of L&L elements, ceramic holders, and the Quad option is the best in the industry. **(hotkilns.com/quad)**

Powered Bottom: Available on all T3400 Series kilns. **(hotkilns.com/powered-bottoms-davinci-kilns)**

High Power Option: The T3427-D, T3436-D, & T3445-D can be ordered with extra power. (TB Models)

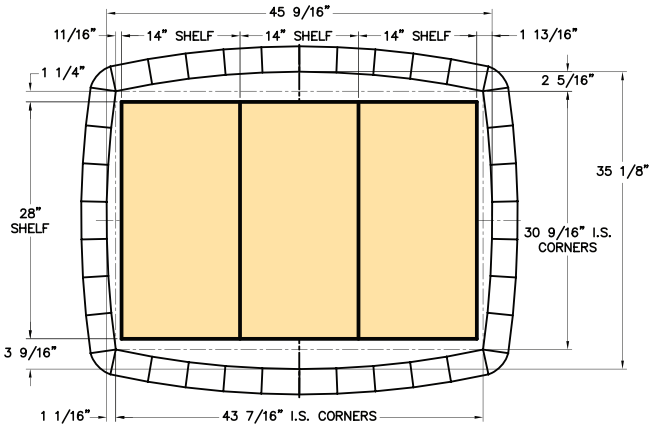
Bell-Lift: Bell-lift system available with a manual or electric winch. **(hotkilns.com/davinci-bell-lift-kilns)**

Furniture Kits

Shelves are high alumina cone 11 shelves. Shelves are 14" x 28" x 3/4". See below for quantity. One post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. Furniture kit includes heat-resistant gloves and 1 lb of cone 10 kiln wash.

Furniture kit for an T3427-D

Crossection



Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions	Ship Weight Kiln Only	Ship Weight Kiln + Kit
TB3418-D	18"	13.8	6 shelves, 2 post kit	H-T-K518/00	62" W x 32" H x 49" D	1 crate: 65" W x 45" H x 48" D 1 crate: 65" W x 74" H x 48" D	1065 lbs	1223 lbs
T3427-D	27"	20.7	9 shelves, 2 post kit	H-T-K527/00	62" W x 41" H x 49" D	1 crate: 65" W x 54" H x 48" D 1 crate: 65" W x 84" H x 48" D	1225 lbs	1452 lbs
T3436-D	36"	27.6	12 shelves, 2 post kit	H-T-K536/00	62" W x 50" H x 49" D	1 crate: 65" W x 63" H x 48" D 1 crate: 65" W x 84" H x 48" D	1475 lbs	1771 lbs
T3445-D	45"	34.5	15 shelves, 3 post kits	H-T-K545/00	62" W x 59" H x 49" D	1 crate: 65" W x 48" H x 48" D 1 crate: 65" W x 36" H x 48" D 1 crate: 65" W x 84" H x 48" D	1675 lbs	2050 lbs

Crossection of Inside: 43-1/2" wide by 30-1/2" deep.

Minimum Space Requirements: 77" wide by 64" deep.

General Dimension Drawings: See each model page on hotkilns.com to download PDF drawings or search on **hotkilns.com/dimensions**

DaVinci T3400-D Series

Electrical Specifications

Standard Models							Powered Bottom Models				
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Part Number	Watts	Amps	Wire Size	Fuse Size
TB3418-D-240	K-T-3418/31	240/1P	19,935	83.1	1 ga	100 a	K-T-341P/31	26,580	110.8	2/0	150 a
TB3418-D-240-3P	K-T-3418/32	240/3P	19,935	71.9	2 ga	90 a	K-T-341P/32	26,580	71.9	2 ga	90 a
TB3418-D-208	K-T-3418/21	208/1P	19,935	95.8	1/0	125 a	K-T-341P/21	26,580	127.8	2/0	150 a
TB3418-D-208-3P	K-T-3418/22	208/3P	19,935	83.0	1 ga	100 a	K-T-341P/22	26,580	83.0	1/0	125 a
TB3418-D-480-3P	K-T-3418/62	480/3P	19,935	24.0	10 ga	30 a	K-T-341P/62	26,580	36.0	6 ga	50 a
T3427-D-240	K-T-3427/31	240/1P	24,936	103.9	1/0	125 a	K-T-342P/31	30,480	127.0	2/0	150 a
T3427-D-240-3P	K-T-3427/32	240/3P	24,936	60.0	3 ga	80 a	K-T-342P/32	30,480	80.6	1 ga	100 a
T3427-D-208	K-T-3427/21	208/1P	24,936	119.9	2/0	150 a	K-T-342P/21	30,480	146.5	4/0	175 a
T3427-D-208-3P	K-T-3427/22	208/3P	24,936	69.2	2 ga	90 a	K-T-342P/22	30,480	93.3	1/0	125 a
T3427-D-480-3P	K-T-3427/62	480/3P	24,936	30.0	8 ga	40 a	K-T-342P/62	30,480	40.0	6 ga	50 a
TB3427-D-240	K-T-342B/31	240/1P	29,901	124.6	4/0	175 a	K-T-342W/31	36,545	152.3	250 mcm	200 a
TB3427-D-240-3P	K-T-342B/32	240/3P	29,901	71.9	2 ga	90 a	K-T-342W/32	36,545	96.9	1/0	125 a
TB3427-D-208	K-T-342B/21	208/1P	29,901	143.8	250 mcm	200 a	K-T-342W/21	36,545	175.8	350 mcm	225 a
TB3427-D-208-3P	K-T-342B/22	208/3P	29,901	83.0	1/0	125 a	K-T-342W/22	36,545	111.8	2/0	150 a
TB3427-D-480-3P	K-T-342B/62	480/3P	29,901	36.0	6 ga	50 a	K-T-342W/62	36,545	48.0	4 ga	60 a
T3436-D-240	K-T-3436/31	240/1P	33,248	138.5	4/0	175 a	K-T-343P/31	38,790	161.6	250 mcm	200 a
T3436-D-240-3P	K-T-3436/32	240/1P	33,248	91.6	1/0	125 a	K-T-343P/32	38,790	100.6	1/0	125 a
T3436-D-208	K-T-3436/21	208/1P	33,248	159.9	250 mcm	200 a	K-T-343P/21	38,790	186.5	350 mcm	225 a
T3436-D-208-3P	K-T-3436/22	208/3P	33,248	105.7	2/0	150 a	K-T-343P/22	38,790	115.7	2/0	150 a
T3436-D-480-3P	K-T-3436/62	480/3P	33,248	40.0	6 ga	50 a	K-T-343P/62	38,790	50.0	3 ga	80 a
TB3436-D-240	K-T-343B/31	240/1P	39,868	166.1	350 mcm	225 a	K-T-343W/31	46,512	193.8	350 mcm	250 a
TB3436-D-240-3P	K-T-343B/32	240/1P	39,868	109.9	2/0	150 a	K-T-343W/32	46,512	120.7	2/0	150 a
TB3436-D-208	K-T-343B/21	208/1P	39,868	191.7	400 mcm	250 a	K-T-343W/21	46,512	223.7	500 mcm	300 a
TB3436-D-208-3P	K-T-343B/22	208/3P	39,868	126.8	4/0	175 a	K-T-343W/22	46,512	139.3	4/0	175 a
TB3436-D-480-3P	K-T-343B/62	480/3P	39,868	48.0	4 ga	60 a	K-T-343W/62	46,512	60.0	3 ga	80 a
T3445-D-240	K-T-3445/31	240/1P	41,560	173.2	250 mcm	200 a	K-T-344P/31	47,100	196.3	350 mcm	225 a
T3445-D-240-3P	K-T-3445/32	240/3P	41,560	120.0	2/0	150 a	K-T-344P/32	47,100	120.0	2/0	150 a
T3445-D-208	K-T-3445/21	208/1P	41,560	199.8	350 mcm	225 a	K-T-344P/21	47,100	226.5	350 mcm	250 a
T3445-D-208-3P	K-T-3445/22	208/3P	41,560	138.4	4/0	175 a	K-T-344P/22	47,100	126.6	4/0	175 a
T3445-D-480-3P	K-T-3445/62	480/3P	41,560	50.0	3 ga	80 a	K-T-344P/62	47,100	60.0	3 ga	80 a
TB3445-D-240	K-T-344B/31	240/1P	49,835	207.7	400 mcm	275 a	K-T-344W/31	56,479	235.4	500 mcm	300 a
TB3445-D-240-3P	K-T-344B/32	240/3P	49,835	143.9	250 mcm	200 a	K-T-344W/32	56,479	143.9	250 mcm	200 a
TB3445-D-208	K-T-344B/21	208/1P	49,835	239.6	500 mcm	300 a	K-T-344W/21	56,479	271.6	600 mcm	350 a
TB3445-D-208-3P	K-T-344B/22	208/3P	49,835	166.0	350 mcm	225 a	K-T-344W/22	56,479	166.0	350 mcm	225 a
TB3445-D-480-3P	K-T-344B/62	480/3P	49,835	60.0	3 ga	80 a	K-T-344W/62	56,479	72.0	2 ga	90 a

UL Listing: All models are c-MET-us listed. 480 models are c-MET-us listed as long as a NEMA1 panel is used.

TB Models: As shown above these are the versions with the “High Power Option”

HERCULES Medium-Sized Front-Loading Kilns

Professional Front-Loading Kiln • 8 & 9 Cubic Feet • Cone 10

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Front-loading.

Construction: Solid welded heavy gauge (1/8") thick steel case with welded stand. Feet include leveling pads.

Case Finish: Powder coated attractive hammertone blue provides superior corrosion resistance.

Door: Heavy-duty door hinges to the left (special option allows it to be hinged on the right). Door opens all the way so that the door opening is completely unobstructed.

Door Plug & Gasket: Brick door has an inset stepped brick plug and fiberglass tadpole gasket around door for tightness of seal.

The Hercules is the potter's dream come true. When you compare the many built-in durability and performance features to the competition you will appreciate its true value. And all of this extra value doesn't cost that much.

Insulation: 3" K23 firebrick with 2" mineral wool back up.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Arched Roof for Strength: The arch is made of 4-1/2" of extra-strong 2500°F K25 arch brick.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered. Two or three in the door for easy viewing.

Elements: Heavy-duty. Elements evenly divided into 2 or 3 zones. Elements are located in the door for even heating of the entire chamber.

Control Panel: Separate panel is mounted on the right side. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access. An on/off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, Pre-Heat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or Three zone control for even heating is included.

Door Shut Off Switch: Shuts power off when door is opened.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: MET-us listed to UL499 standard.

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KILNS BUILT TO LAST

Bulletin No: HC-3-15

HERCULES Medium-Sized Front-Loading Kilns

More Features

Door Gasket for Superior Door Seal

Safety Door Switch

Door Elements for Even Heating

4-1/2" K25 Full Arch for Strength

Welded Stand can be removed

Thick Powder-Coated Steel Case

DynaTrol with Dynamic Zone Control

8 Gauge TC with Protection Tube

Options

Furniture/Shelves Kit: Furniture kit includes the cone 11 shelves mentioned below. One post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. Includes, heat-resistant gloves and 1 lb cone 10 kiln wash.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

High Limit Control: (hotkilns.com/high-limit). With or without Back up contactors.

KISS Software: Monitor and control kiln from your computer. Includes datalogging. **(hotkilns.com/kiss)**

480 Volts: Available with a NEMA 1 Control Panel to maintain the c-MET-us listing.

Hinge on Right: Hinge mounted on the right instead of the left.

Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Hearth Dimensions	Furniture Kit	Outside Dimensions	Shipping Dimensions	Ship Weight Kiln (lbs)
EL2424-H	25" W x 26" D x 24" H	8.0	22" x 22"	(4) 11" x 22" shelves, 1 post kit	47" W x 43" D x 63" H	60" W x 57" D x 69" H	1075 lbs
EL2427-H	25" W x 26" D x 27" H	9.0	22" x 22"	(6) 11" x 22" shelves, 1 post kit	47" W x 43" D x 66" H	60" W x 57" D x 72" H	1200 lbs

Hearth Height: Approximately 30"

Moving and installation: These kilns will go through a standard 34-1/2" door that is at least 74" high. The kiln must be moved on a flat surface. The case is designed to be picked up by a forklift or pallet jack from the front, back, or sides.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
EL2424-H-240	K-B2424/31	240/1P	15,000	63.0	3 ga	80 Amps
EL2424-H-240-3P	K-B2424/32	240/3P	15,000	55.0	4 ga	70 Amps
EL2424-H-208	K-B2424/21	208/1P	15,000	73.0	1 ga	100 Amps
EL2424-H-208-3P	K-B2424/22	208/3P	15,000	63.0	3 ga	80 Amps
EL2424-H-480-3P	K-B2424/62	480/3P	15,000	28.0	8 ga	40 Amps
EL2427-H-240	K-B2427/31	240/1P	16,500	68.8	2 ga	90 Amps
EL2427-H-240-3P	K-B2427/32	240/3P	16,500	39.6	6 ga	50 Amps
EL2427-H-208	K-B2427/21	208/1P	16,500	79.3	1 ga	100 Amps
EL2427-H-208-3P	K-B2427/22	208/3P	16,500	45.7	6 ga	60 Amps
EL2427-H-480-3P	K-B2427/62	480/3P	16,500	19.8	10 ga	25 Amps

UL Listing: All models are MET-us listed. 480 models are MET-us listed as long as a NEMA1 panel is used.

Power connection: All models are a direct connection to a terminal block in the control panel.

Easy-Load Large Front-Loading Kilns

Large Front-Loading Professional Kilns • Cone 10

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Front-loading.

Construction: Solid welded heavy gauge (1/8") thick steel case with integrated welded stand. Feet include leveling bolts.

Case Finish: Powder coated attractive hammertone blue provides superior corrosion resistance.

Door: Heavy-duty door hinges to the left (special option allows it to be hinged on the right). Door opens all the way so that the door opening is completely unobstructed.

Door Plug & Gasket: Brick door has an inset stepped brick plug and fiberglass tadpole gasket around door for tightness of seal.

Insulation: 3" K23 brick with 2" mineral wool back up.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Model EL3048

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Arched Roof for Strength: The arch is made of 4-1/2" of extra-strong 2500°F K25 arch brick.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered. Three per kiln.

Elements: Heavy-duty. Elements evenly divided into 3 zones. Elements on the door for even heating.

Control Panel: Separate panel is mounted on the right side. 50 amp mechanical contactors with control relays. Branch fusing included. The control panel is hinged for easy access. An on/off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, Pre-Heat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Three zone control for even heating is included.

Door Shut Off Switch: Shuts power off when door is opened.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: MET-us listed to UL499 standard.

Options

Model EL2448

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

High Limit Control: (hotkilns.com/high-limit). With or without Back up contactors.

KISS Software: Monitor and control kiln from your computer. Includes datalogging. **(hotkilns.com/kiss)**

480 Volts: Available with a NEMA 1 Control Panel to maintain the c-MET-us listing.

120 Volt Control Power Option: Allows control circuit to be plugged into a protected UPS power supply.

Hinge on Right: Hinge mounted on the right instead of the left.

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KILNS BUILT TO LAST

Bulletin No: EL-3-15

Easy-Load Large Front-Loading Kilns

Furniture Kits

Furniture/Shelves Kit: Furniture kit includes the cone 11 shelves mentioned below. One post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. Includes, heat-resistant gloves and 1 lb cone 10 kiln wash.

Dimension & Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Hearth Dimensions	Furniture Kit	Outside Dimensions	Shipping Dimensions	Ship Weight Kiln (lbs)
EL2436	25" W x 26" D x 36" H	12.0	22" x 22"	(8) 11" x 22" shelves, 2 post kits	47" W x 43" D x 74" H	60" W x 57" D x 80" H	1350 lbs
EL2448	25" W x 26" D x 48" H	16.0	22" x 22"	(10) 11" x 22" shelves, 2 post kits	47" W x 43" D x 74" H	60" W x 57" D x 80" H	1500 lbs
EL2848	31" W x 26" D x 48" H	20.0	28" x 22"	(12) 14" x 24" shelves, 2 post kits	53" W x 43" D x 75" H	66" W x 57" D x 82" H	1750 lbs
EL3048	31" W x 32" D x 48" H	25.0	28" x 28"	(12) 14" x 28" shelves, 2 post kits	53" W x 50" D x 75" H	66" W x 64" D x 82" H	2000 lbs

Hearth Height: Approximately 30" for EL2436 and 18" for all other models

Moving and installation: The EL2436 will go through a standard 34-1/2" door that is at least 76" high. The EL2448 and EL2848 will go through a door that is 34-1/2" wide by 86" high. The EL3048 will go through a door that is 40-1/2" wide by 86" high. The kiln must be moved on a flat surface. The case is designed to be picked up by a forklift or pallet jack from the front, back or sides.

General Dimension Drawings: See each model page download PDF drawings.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
EL2436-240	K-B-2436/31	240/1P	19,000	80.0	1 ga	100 Amps
EL2436-240-3P	K-B-2436/32	240/3P	19,000	46.0	6 ga	60 Amps
EL2436-208	K-B-2436/21	208/1P	19,000	92.0	1/0	125 Amps
EL2436-208-3P	K-B-2436/22	208/3P	19,000	53.0	4 ga	70 Amps
EL2436-480-3P	K-B-2436/62	480/3P	19,000	24.0	10 ga	30 Amps
EL2448-240	K-B-2448/31	240/1P	24,200	101.0	1/0	125 Amps
EL2448-240-3P	K-B-2448/32	240/3P	24,200	59.0	3 ga	80 Amps
EL2448-208	K-B-2448/21	208/1P	24,200	117.0	2/0	150 Amps
EL2448-208-3P	K-B-2448/22	208/3P	24,200	68.0	2 ga	90 Amps
EL2448-480-3P	K-B-2448/62	480/3P	24,200	30.0	8 ga	40 Amps
EL2848-240	K-B-2848/31	240/1P	27,000	113.0	2/0	150 Amps
EL2848-240-3P	K-B-2848/32	240/3P	27,000	66.0	2 ga	90 Amps
EL2848-208	K-B-2848/21	208/1P	27,000	130.0	4/0	175 Amps
EL2848-208-3P	K-B-2848/22	208/3P	27,000	75.0	1 ga	100 Amps
EL2848-480-3P	K-B-2848/62	480/3P	27,000	33.0	6 ga	50 Amps
EL3048-240	K-B-3048/31	240/1P	31,500	132.0	4/0	175 Amps
EL3048-240-3P	K-B-3048/32	240/3P	31,500	76.0	1 ga	100 Amps
EL3048-208	K-B-3048/21	208/1P	31,500	152.0	250 MCM	200 Amps
EL3048-208-3P	K-B-3048/22	208/3P	31,500	88.0	1/0	125 Amps
EL3048-480-3P	K-B-3048/62	480/3P	31,500	39.0	6 ga	50 Amps

UL Listing: All models are MET-us listed to UL499 standards. 480 models are MET-us listed as long as a NEMA1 panel is used.

Power connection: All models are a direct connection to a terminal block in the control panel.

LIBERTY-BELLE Home Studio Kiln

Portable Automatic Top-Loading Kilns • 2.5 or 2.6 Cubic Foot • Cone 10

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: Lid position, when open, rests at an angle away from the kiln. Chains are used to secure the lid in place when open.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: Two 9" high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: Choice of 2-1/2" or 3" K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.

Elements: Heavy-duty. 2 elements per 9" high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a control panel/element connection box. A layer of insulation and separation plate helps keep the controls cool. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: One-Touch™ Intuitive Kiln Control easily fires the bisque and glaze programs typically used. It is also easy to adjust simple parameters like cone, delay, hold, heat-up, and cool-down rates. Also four custom ramp/hold programs with 8 segments each. **(hotkilns.com/one-touch)**

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tube.

Relays: Mercury free relays.

Power Cord/Plug: 30 Amp NEMA 14-30 twelve foot cord included. Also see options.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

UL Listing: c-MET-us listed to UL499 standards.

The Liberty-Belle Kiln meets the needs of serious craft hobbyists, potters, and others who need a simple, small automatic kiln ideal for home use or for a studio test kiln. This sectional kiln is easy to move and set up by the home user. The 12 foot long 30 amp cord makes it easy to plug into a dryer outlet.

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KILNS BUILT TO LAST

Bulletin No: LB-3-15

LIBERTY-BELLE Home Studio Kiln

Options

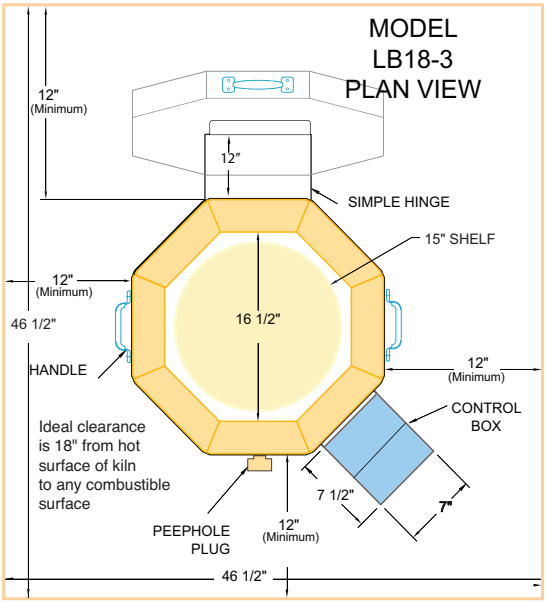
Furniture Kit:

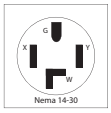
LB18-3 uses one 15'' full round shelf, four 15'' half shelves, four each 1'', 2'', 4'', and 6'' triangular posts plus 1 lb of Cone 10 kiln wash. (P/N: H-L-KIT/30).

LB18 (2-1/2" brick version) is the same except with 15-1/2" shelves (P/N: H-L-KIT/00).

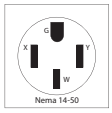
Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Optional Plugs: Standard NEMA 14-30 plug can be changed by customer to NEMA 14-50 (hardware is included to do this). A NEMA 15-50, NEMA 6-50, NEMA 10-30, or NEMA 10-50 plug is available for an extra charge. A NEMA 6-30 plug or a six foot NEMA 6-50 cord/plug is available for no charge. All plugs can be easily changed in the field if necessary.





[Standard]



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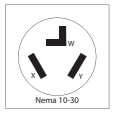

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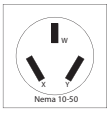

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Dimensions & Weight

Model Number	Inside Dimensions	Cubic Feet	Brick Thick	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Wght Kiln Only	Ship Wght Kiln + Kit
LB18-240	17-1/2"D x 18"H	2.6	2-1/2"	5 Shelves, 1 Post Kit	H-L-KITL/00	29" W x 31" H x 30" D	36" W x 55" H x 36" D	200 lbs	240 lbs
LB18-208	17-1/2"D x 18"H	2.6	2-1/2"	5 Shelves, 1 Post Kit	H-L-KITL/00	29" W x 31" H x 30" D	36" W x 55" H x 36" D	200 lbs	240 lbs
LB18-3-240	16-1/2"D x 18"H	2.5	3"	5 Shelves, 1 Post Kit	H-L-KITL/30	29" W x 32" H x 30" D	36" W x 55" H x 36" D	215 lbs	250 lbs
LB18-3-208	16-1/2"D x 18"H	2.5	3"	5 Shelves, 1 Post Kit	H-L-KITL/30	29" W x 32" H x 30" D	36" W x 55" H x 36" D	215 lbs	250 lbs

Minimum Space Requirements: 46-1/2" wide by 46-1/2" deep.

Moving and installation: This comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
LB18-240	K-L-1800/31	240/1P	5,760	24	10 ga	30 Amps
LB18-208	K-L-1800/21	208/1P	4,992	24	10 ga	30 Amps
LB18-3-240	K-L-1803/31	240/1P	5,760	24	10 ga	30 Amps
LB18-3-208	K-L-1803/21	208/1P	4,992	24	10 ga	30 Amps

UL Listing: c-MET-us listed to UL499 standards.

Power connection: A 30 amp NEMA 14-30 twelve foot plug is included. May be direct wired. Other plugs are optional. All models are single phase.

Energy, Time and Firing Costs: The kiln when empty can reach Cone 10 in about 2 hours and use about 12.5 KWH (this would cost about $1.00 @ 8 cents per KWH. When fired with a heavy load of 55 pounds it took 23 KWH to go to Cone 6 on a Fast Glaze program - about $1.84).

Easy-Fire XT Square Top-Loading Kilns

Square Sectional Kilns • Cone 10 • 3” Brick

Features & Benefits

Temperature Rating: Most voltages are Cone 10, 2350°F, 1290°C (See electrical specifications)

Lid, Hinge & Stand: Aluminized Steel Stand.

Assembly: 9” high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation around kiln shelves. Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws on case.

Insulation: 3” K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load..

Elements: Heavy-duty. 2 elements per 9” high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel that is piggy-backed to the element connection box. A layer of insulation and this separation helps keep the controls cool. The control panel and element box are hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included. Some models have branch fusing.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Two or three zones with separate thermocouples.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1” diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

Power Cord/Plug: 50 Amp NEMA 6-50 six foot cord included for one phase, 50 Amp NEMA 15-50 six foot cord included for three phase. Some models are direct wired. See electrical specifications.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. In addition web videos show how to assemble the kiln and how to **fire it. (hotkilns.com/assembling-easy-fire-kiln)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

An e2827-XT-QD (with Quad element option) is shown. The control panel is mounted on the right side of the kiln.

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KILNS BUILT TO LAST

Bulletin No: eXT-3-15P

Easy-Fire XT Square Top-Loading Kilns

Options

Furniture Kits: Shelves are high alumina cone 11 shelves. See below for shelf sizes. Each post kit includes six each, 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Furniture kit for an X2327-EZ

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Quad Element Design: Extra long element life **(hotkilns.com/quad-element-option)**

Dimension & Weight Specifications

Model Number	Inside Height	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
E2318-XT	18"	5.0	(4) 20" x 10" shelves	H-X-K318/00	40" W x 32" H x 42" D	48" W x 55" H x 44" D	500 lbs	550 lbs
E2327-XT	27"	8.1	(6) 20" x 10" shelves	H-X-K327/00	40" W x 41" H x 42" D	48" W x 60" H x 44" D	600 lbs	665 lbs
E2818-XT	18"	7.8	(4) 23" x 11.5" shelves	H-X-K318/00	45" W x 32" H x 47" D	48" W x 55" H x 44" D	625 lbs	695 lbs
E2827-XT	27"	11.7	(6) 23" x 11.5" shelves,	H-X-K327/00	45" W x 41" H x 47" D	48" W x 60" H x 44" D	735 lbs	835 lbs

Crossection of Inside: 22" wide by 22" deep for E2318-XT & E2327-XT. 26-1/2" wide by 26-1/2" deep for E2818-XT & E2827-XT.

Minimum Space Requirements: 60" wide by 60" deep for E2318-XT and E2327-XT. 66" wide by 66" deep for the E2818-XT and E2827-XT.

General Dimension Drawings: See dimension drawings of similar DaVinci models (for kiln bodies) and Easy-Fire kilns (for control panel dimensions).

Electrical Specifications

Standard Models									
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Branch Fusing	Power Connection	Max Temp/Cone
E2318-XT-240	K-Z-231B/31	240/1P	9,460	39.4	6 ga	50 a	No	6-50 Plug	Cone 10, 2350F
E2318-XT-240-3P	K-Z-231B/32	240/3P	9,460	34.1	6 ga	50 a	No	15-50 Plug	Cone 10, 2350F
E2318-XT-208	K-Z-231B/21	208/1P	9,460	45.5	6 ga	60 a	No	6-50 Plug	Cone 10, 2350F
E2318-XT-208-3P	K-Z-231B/22	208/3P	9,460	39.4	6 ga	50 a	No	15-50 Plug	Cone 10, 2350F
E2327-XT-240	K-Z-232B/31	240/1P	11,520	48.0	6 ga	60 a	No	6-50 Plug	Cone 10, 2350F
E2327-XT-240-3P	K-Z-232B/32	240/3P	11,520	27.7	8 ga	40 a	No	15-50 Plug	Cone 10, 2350F
E2327-XT-208	K-Z-232B/21	208/1P	9,980	48.0	6 ga	60 a	No	6-50 Plug	Cone 5, 2170F
E2327-XT-208-X	K-Z-232X/21	208/1P	11.520	55.4	4 ga	70 a	Yes	Direct - No Plug	Cone 10, 2350F
E2327-XT-208-3P	K-Z-232B/22	208/3P	11,520	32.0	8 ga	40 a	No	15-50 Plug	Cone 10, 2350F
E2818-XT-240	K-Z-281B/31	240/1P	11,520	48.0	6 ga	60 a	No	6-50 Plug	Cone 10, 2350F
E2818-XT-240-3P	K-Z-281B/32	240/3P	11,520	41.6	6 ga	60 a	No	15-50 Plug	Cone 10, 2350F
E2818-XT-208	K-Z-281B/21	208/1P	9,980	48.0	6 ga	60 a	No	6-50 Plug	Cone 5, 2170F
E2818-XT-208-3P	K-Z-281B/22	208/3P	11,520	48.0	6 ga	60 a	No	15-50 Plug	Cone 10, 2350F
E2827-XT-240	K-Z-282B/31	240/1P	11.520	48.0	6 ga	60 a	No	6-50 Plug	Cone 5, 2170F
E2827-XT-240-X	K-Z-282X/31	240/1P	14,930	62.2	3 ga	80 a	Yes	Direct - No Plug	Cone 10, 2350F
E2827-XT-240-3P	K-Z-282B/32	240/3P	14,930	35.9	6 ga	50 a	No	15-50 Plug	Cone 10, 2350F
E2827-XT-208	K-Z-282B/21	208/1P	9,980	48.0	6 ga	60 a	No	6-50 Plug	Cone 1, 2080F
E2827-XT-208-X	K-Z-282X/21	208/1P	14,930	71.8	2 ga	90 a	Yes	Direct - No Plug	Cone 10, 2350F
E2827-XT-208-3P	K-Z-282B/22	208/3P	14,930	41.4	6 ga	60 a	No	15-50 Plug	Cone 10, 2350F

UL Listing: Not listed. **Non-US Electrical Specifications:** 220 volt & 380 volt electrical specifications can be found for each model on our web site.

JH Series Cone 12 Crystalline Kilns

Designed for Crystalline Glaze • Cone 12

Features & Benefits

Temperature Rating: Cone 12, 2400°F, 1315°C

Power Loading: These kilns come with approximately 25% more power than a regular kiln of similar size.

Loading: Lid position, when open, rests at an angle away from the kiln.

Hinge: Spring loaded for easy opening while still allowing lid to be supported without supports that get in the way of loading. (The JD18-JH lid is not spring loaded. It is instead supported by chains.)

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

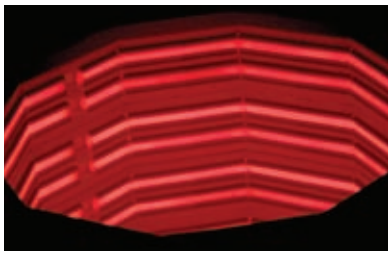
Assembly: Two or three 9" high sections stack on top of each other. Easy to assemble. Bottom is reversible.

Construction: Stainless steel wrapped around brick with 3 clamps on each section. All stainless screws.

Insulation: 2-1/2" K25 firebrick. on side and bottom, 3" K25 on top. This design is optimized to fire crystalline glaze.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load.



Quad Element Design: Super Heavy-duty, thick elements with 4 rows of elements per 9" high section.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a separate control panel. Mounting and type of panel vary with model number. The control panel and element box are hinged for easy access and maintenance. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics. Two programs can be combined for one 16 segment program.

Zone Control: Two or three zone (one zone per kiln section) Each zone has a separate thermocouple.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered. One per section.

The JH kilns were designed specifically for firing crystalline glaze. They feature special 2500°F firebrick for extra high cone 12 firing, extra power for fast heat up, super heavy-duty elements to hold up to the special rigors of crystalline firing, minimal insulation to allow for fast cool down, and type S thermocouples for long life.

Thermocouples: Platinum Type S with alumina protection tubes are standard.

Relays: Mercury free relays.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**

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KILNS BUILT TO LAST

Bulletin No: JH-3-15

JH Series Cone 12 Crystalline Kilns

Options

Furniture/Shelves Kit: Shelves are round Cone 11 high alumina shelves. Each post kit includes six each 1/2", 1", 2" 4", 6" and 8" high 1-1/2" square cordierite posts. All furniture kits include heat-resistant gloves and 1 lb of cone 10 kiln wash.

KISS Software: This is to monitor and control the firing from your computer. It is particularly good for maintaining an accurate log of your firing cycles. **(hotkilns.com/kiss)**

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent-sure)**

Dimension& Weight Specifications

Model Number	Inside Dimensions	Cubic Feet	Furniture Kit	Furniture Kit Part No.	Outside Dimensions	Shipping Dimensions (with Kit)	Ship Weight Kiln Only	Ship Weight Kiln + Kit
JD18-JH	17-1/2" Diam x 18" H	2.6	(1) 15-1/2" full, (4) half shelves	H-J-K180/00	28" W x 31-1/2" H x 39" D	36" W x 55" H x 36" D	205 lbs	250 lbs
e23S-JH	23-3/8" Diam x 18" H	4.7	(1) 21" full, (4) half shelves	H-E-K23S/00	32" W x 31-1/2" H x 45" D	44" W x 55" H x 44" D	280 lbs	365 lbs
JD230-JH	23-3/8" Diam x 27" H	7.0	(2) 21" full, (4) half shelves	H-J-K23X/00	32" W x 40-1/2" H x 45" D	44" W x 60" H x 44" D	340 lbs	435 lbs
JD2927-JH	29" Diam x 27" H	10.3	(8) 25-1/2" half shelves	H-J-K292/00	40" W x 40-1/2" H x 50" D	48" W x 60" H x 44" D	595 lbs	715 lbs

Minimum Space Requirements: Refer to General Dimension Drawings for the corresponding Jupiter Automatic models

General Dimension Drawings: PDFs of all General Dimension drawings can be downloaded from each model page on our web site. The General Dimension will be similar to the base model (i.e. a JD18-JH will use the General Dimension Drawing of a JD18 with 2-1/2" brick). The only difference is that the 3" bottom will add an extra 1/2" to the height.

Electrical Specifications

Standard Models								
Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size	Power Connection	Number of Zones
JD18-JH-240	K-A-180J/31	240/1P	8,800	36.7	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
JD18-JH-240-3P	K-A-180J/32	240/3P	8,800	31.8	6 ga	50 amps	Cord with NEMA 15-50 Plug	2
JD18-JH-208	K-A-180J/21	208/1P	8,800	42.3	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
JD18-JH-208-3P	K-A-180J/22	208/3P	8,800	36.6	6 ga	50 amps	Cord with NEMA 15-50 Plug	2
e23S-JH-240	K-E-23SJ/31	240/1P	10,500	47.9	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
e23S-JH-240-3P	K-E-23SJ/32	240/3P	10,500	41.5	6 ga	50 amps	Cord with NEMA 15-50 Plug	2
e23S-JH-208	K-E-23SJ/21	208/1P	9,984	48.0	6 ga	60 amps	Cord with NEMA 6-50 Plug	2
e23S-JH-208-3P	K-E-23SJ/22	208/3P	9,984	41.6	6 ga	50 amps	Cord with NEMA 15-50 Plug	2
JD230-JH-240	K-A-231J/31	240/1P	13,680	57.0	3 ga	80 amps	Direct to Fused Disconnect	3
JD230-JH-240-3P	K-A-231J/32	240/3P	13,680	32.9	6 ga	50 amps	Cord with NEMA 15-50 Plug	3
JD230-JH-208	K-A-231J/21	208/1P	12,480	60.0	3 ga	80 amps	Direct to Fused Disconnect	3
JD230-JH-208-3P	K-A-231J/22	208/3P	12,480	34.7	6 ga	50 amps	Cord with NEMA 15-50 Plug	3
JD2927-JH-240	K-A-292J/31	240/1P	18,039	75.2	1 ga	100 amps	Direct to Fused Disconnect	3
JD2927-JH-240-3P	K-A-292J/32	240/3P	18,039	43.5	6 ga	60 amps	Cord with NEMA 15-50 Plug	3
JD2927-JH-208	K-A-292J/21	208/1P	18,039	86.7	1/0 ga	125 amps	Direct to Fused Disconnect	3
JD2927-JH-208-3P	K-A-292J/22	208/3P	18,039	50.1	4 ga	70 amps	Direct to Fused Disconnect	3

UL Listing: Not listed to UL499 standards.

DL SERIES Small Test & Hobby Kilns

Small Multi-Purpose Kilns • 0.78 Cubic Foot

Features and Benefits

Temperature Rating: See Specifications.

Loading: Lid position, when open, rests at an angle away from the kiln. Chains are used to secure the lid in place when open.

Hinge: The hinge of the Doll/Test kiln is not spring-loaded.

Stand: Heavy-duty 14 gauge full solid stand with multiple bends for strength. Bolt on legs. Feet protectors included.

Assembly: One 9" high section. Easy to assemble.

Construction: Stainless steel wrapped around brick with 3 clamps. All stainless screws on case.

Insulation: 2-1/2" K23 firebrick.

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from loading damage, keep elements from falling out of grooves, makes changing elements easy, and optimizes heat transfer to load..

Elements: Heavy-duty. 3 Elements.

Element Connections: Proprietary all-ceramic element connection block makes changing elements easy.

Control Panel: All controls and components are mounted in a control panel/element control box. A layer of insulation and separation plate helps keep the controls cool. Control box can be easily removed for servicing. On/off switch and control fuse are included.

Control: One-Touch™ Intuitive Kiln Control easily fires the bisque and glaze programs typically used. It is also easy to adjust simple parameters like cone, delay, hold, heat-up, and cool-down rates. Also four custom ramp/hold programs with 8 segments each. **(hotkilns.com/one-touch)**

Peephole Plugs: One non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered.

Thermocouples: Type K 8 gauge with ceramic protection tube.

Power Cord/Plug: Included. See Electrical Specifications.

Instructions: Complete visual instructions with control reference, process information, assembly, troubleshooting, and parts list. Web videos show how to use the control. **(hotkilns.com/videos)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**.

The Doll/Test kilns are meant for small ceramic work such as dolls, for testing glazes without firing a large load, and for other laboratory and home uses. It is available with two different controls and in 15 amp (Cone 5) or 18 amp (Cone 10) 120 volt versions or various high voltage versions for extra power and higher temperatures.

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KILNS BUILT TO LAST

Bulletin No: DL-3-15

DL SERIES Small Test & Hobby Kilns

Small Multi-Purpose Kilns • 0.78 Cubic Foot

Options

FURNITURE / ACCESSORY KIT

Two 9" full round shelf, one 9" half shelf, four each 1/2", 1", 1-1/2", 2", 2-1/2", and 3" triangular posts plus one pound of Cone 10 kiln wash. (P/N: H-L-/00)

CONTROLS & THERMOCOUPLES

DynaTrol Control: Dynatrol with 4 Easy-Fire programs, 6 Vary-Fire programs, Pre-Heat, Delay, Program & Segment Review, and Diagnostics.

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4" diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Dimension & Weights

Inside Dimensions: 11" diameter by 9" high, 6 sides

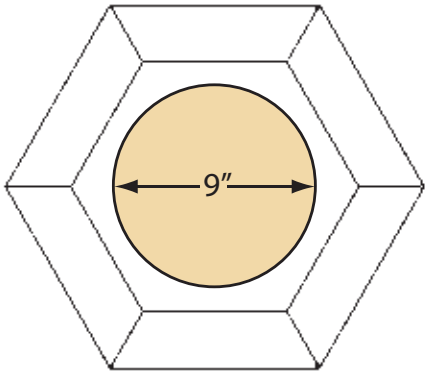
Outside Dimensions: 19" wide by 19" high by 23" deep

Minimum Space Requirements: 43" wide by 47" deep.

Shipping Dimensions: 36" by 36" by 25" high (with or without Furniture Kit)

Shipping Weight: 110 pounds for kiln. 130 pounds for kiln with furniture kit.

Moving and installation: This comes assembled but can be quickly disassembled and reassembled to move through any door or up stairs. It comes packed in a skidded carton with secure foam-in-place packaging.



Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Max Cone	Amps	Wire Size	Fuse Size
DL11	K-D-DL11/10	120/1P	1,800	5	15.0	14 ga	20 Amps
DLH11	K-D-DLH1/10	120/1P	2,160	6	18.0	14 ga	25 Amps
DL11-DB	K-D-DL1B/10	120/1P	1,800	5	15.0	14 ga	20 Amps
DL11-D	K-D-DL1D/10	120/1P	1,800	5	15.0	14 ga	20 Amps
DLH11-DB	K-D-DLHB/10	120/1P	2,160	6	18.0	14 ga	25 Amps
DLH11-D	K-D-DLHD/10	120/1P	2,160	6	18.0	14 ga	25 Amps
DLH11-DXB	K-D-DLHB/31	240/1P	2,800	10	11.7	12 ga	20 Amps
DLH11-DX	K-D-DLHD/31	240/1P	2,800	10	11.7	12 ga	20 Amps
DLH11-DXB	K-D-DLHB/21	208/1P	2,800	10	13.5	12 ga	20 Amps
DLH11-DX	K-D-DLHD/21	208/1P	2,800	10	13.5	12 ga	20 Amps

UL Listing: Not listed to UL499 standards.

Power connection: A 15 Amp NEMA 5-15 six foot cord is included for DL 120 volt models. A 20 Amp NEMA 5-20 six foot cord is included for DLH 120 volt models. A 20 Amp NEMA 6-20 45" cord is included for DLH 208 volt and 240 volt models.

Vent-Sure Downdraft Vent

Downdraft Vent for L&L Kilns

Features & Benefits

Type of Vent: Downdraft - pulls air from the bottom of a kiln to ventilate fumes from the kiln under vacuum. Vents kiln fumes to the outside. The Vent-Sure downdraft ventilation system produces better firing by promoting higher temperature uniformity in the kiln - up to a 1/2 cone improvement.

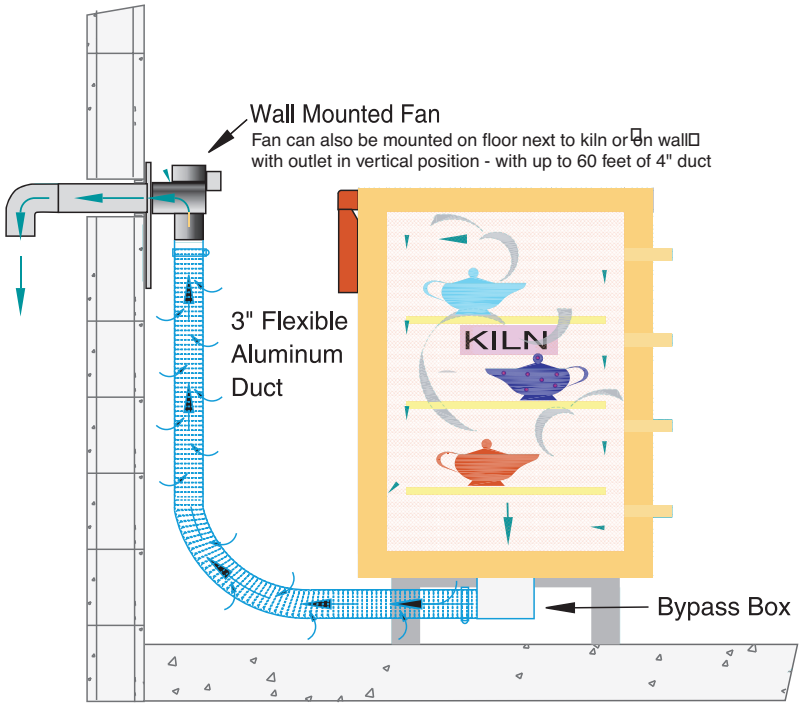
Voltage and Amperage: 120 Volts at 1.37 Amps.

On/Off Switch and Cord: Switch on six foot cord (120 volt models only).

Blower Mounting: Blower is normally mounted on the wall with discharge through a 4" round opening. (See Options below for optional Multi-mount bracket). This keeps the heat of the kiln away from the motor (for long motor life) and keeps the motor vibration away from the kiln (which can cause ware to move, damage to the kiln, and misfiring of cones on a kiln sitter). Although the vent motor normally discharges right through the wall it is mounted on, use of 4" duct can extend this distance 60 feet (horizontally or vertically) with up to four 90 degree bends.

Duct Work: 15 Feet of 3" flexible and expandable duct is included along with necessary hose clamps. Longer lengths or lengths of 3" stove pipe can be used as well.

Capacity: The blower vents up to 130 cfm (cubic feet per minute). This will handle up to a 20 cubic foot kiln (and usually larger) or even two separate kilns. More than one vent can be attached to larger kilns.


Wall Mounted Fan
Fan can also be mounted on floor next to kiln or on wall with outlet in vertical position - with up to 60 feet of 4" duct
3" Flexible Aluminum Duct
KILN
Bypass Box

The Vent-Sure pulls air out of the kiln and the room keeping fumes in the duct under vacuum so any leaks get pulled out instead of pushed into your room. The Vent-Sure is the worry-free, super-safe vent!

Vent Control: A vacuum bypass on the kiln bypass/collection box adjusts the amount of venting from the system.

Application: The Vent-Sure is designed to be used on almost all L&L kilns.

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**.

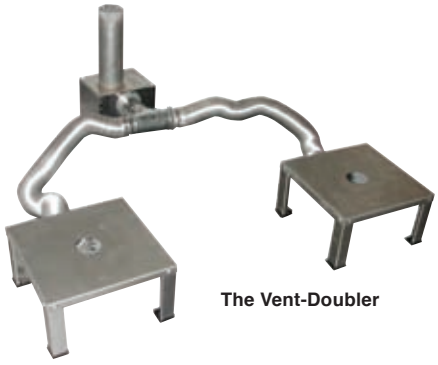
UL Listing: The Vent-Sure is c-MET-us listed to UL499 standards for use with Easy-Fire, Jupiter, Liberty-Belle, and DaVinci kilns. It is MET-us listed to UL499 standards for use with Hercules and Easy-Load kilns.

Options

Multi-Mounting Bracket: An adapter to mount our motor on the floor is available for people who don't want to mount the motor on the wall. There is a 4" duct outlet that you can hook up to an existing wall opening. This can be used to mount motor on wall as well with output going into an existing ventilation system. M-V-BRKT/00

The Multi-Mounting Bracket

Vent Doubler: The Vent-Doubler allows you to connect two kilns to a Vent-Sure vent system. This can be added to an existing vent system or ordered with a new vent. In some cases you may be able to fire two kilns at once. The Vent-Sure has enough force to vent at least 20 cubic feet of kiln. The "T" duct fitting attaches to the inlet of the fan motor. There are two dampers on it to allow you to both control the flow and to shut off one or the other kiln. Flexible aluminum duct connects this "T" duct and the two fittings that attach to the kiln stands. M-V-VENT/DB



The Vent-Doubler

220-240 Volt Option: Motor is 220 volt. Plug to be specified.

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KILNS BUILT TO LAST

Bulletin No: VS-3-15

Vent-Sure Downdraft Vent

Frequently Asked Questions

How do I know if the system is working?

The easiest way to test the operation of the vent system is to turn the unit on and to place a lit match directly over and level with one of the holes in the bottom of the kiln. The flame from the match should be gently pulled into the kiln as a result of the draft.

How hot does the duct get during the firing?

Due to the introduction of fresh air through the plenum of the vent system mixing with the hot gases being drawn from the kiln, the temperature of the duct is below 150oF. This will prevent burns from occurring in the event of the duct being touched.

How long can the duct be and with many bends?

Up to 60 feet of ducting containing four 90 degree bends may be safely used with no drop in static air flow at the duct exhaust point or a reduction in draw at the kiln. The ducting can be run either horizontally or vertically.

Do I need double wall duct when going through the roof?

You do not normally need double wall ducting when going through the roof since the pipe or duct does not reach high temperature. It is always advisable to check your local building codes for their requirements.

What type of duct do I use if I need more than 15 feet?

You can use more of the flexible aluminum dryer ducting or you can use galvanized furnace ducting. We recommend using 4" diameter galvanized duct.

Will the fumes coming through the vent damage my plants, the neighborhood pets or disturb the local environment?

No. The fumes and the gases coming from the kiln have been diluted with enough fresh air to make them safe for the environment. Do not, however, place the outlet of the vent below an open window.

Will using the vent cause my firing to take longer?

The vent system pulls only a very small amount of air out of the kiln, so very little heat is removed and firing times will change very little. For some kilns, a high firing may take a little longer. The insulation value and the number of air leaks in the kiln also determine the length of the firing. We have seen vents overpower smaller kilns - so it is important to adjust the amount of venting in some cases. On the other hand an example of an e23T seven cubic foot kiln firing an 85 pound load on Fast Glaze program to cone 8 took 7 hours and 4 minutes with a vent on and 6 hours and 24 minutes without a vent. The vent was on the whole time.

What does it cost to operate the vent system?

The vent system typically costs less than 1 cent/hour to operate (electricity costs). Vent systems save on heating and cooling costs when compared to hoods. Hoods remove massive amounts of air from the kiln room - air that may have been heated or cooled, depending on the time of year. Downdraft type vents remove 80% less air in the kiln room than a hood. (It does cost more to run the vent because it does take heat out of the kiln. For instance an e23T in the example above took 70 KW hours with a vent on and 62 KW hours without a vent. At 8 cents per KW hour that would be a cost of $0.64. The vent was on the whole time).

Will the cold air entering the kiln damage the product?

The amount of air that is entering the kiln is so small that it does not cause problems with the ware. The top holes are placed toward the outside of the chamber area so that no air comes down directly onto ware that is placed near the top of the kiln. (L&L NOTE: This is fine but we do not normally recommend holes in the lid - a kiln is porous enough).

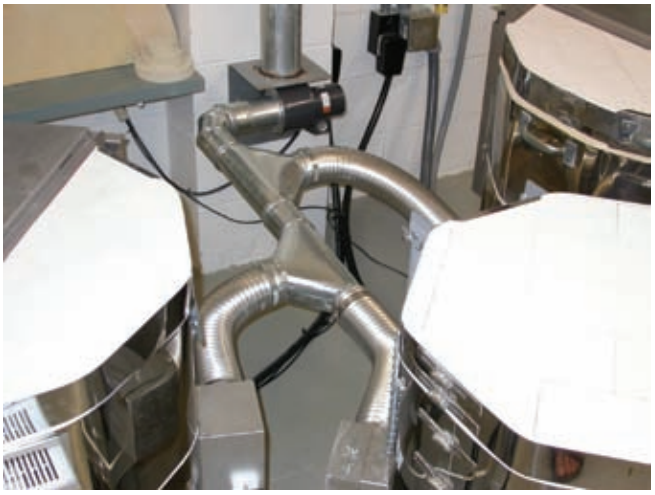
Will faster cooling crack the ware if I leave the vent on during the cooling Cycle?

No. Some kilns can cool an average of 4-1/2 hours faster with the use of the vent system. The cooling is faster but it is taking place at an even rate throughout the kiln avoiding uneven stresses being placed on the ware. Most ceramic ware can be cooled more quickly if the cooling takes place at an even rate. The rate of cooling increase will depend on the kiln size and the density of the load. The vent will remove more molecules of air and hence heat as the kiln cools. This is because the density of the air increases the lower in temperature you go. This is one reason why kiln vents are so efficient - they don't remove too much heat when you don't want them too at the higher temperatures).

What should I do if I still smell fumes?

You should check your duct work to make sure it is properly connected and that the joints are sealed. You can also check for extra air leaks around your kiln and repair these if necessary.

Note: These Frequently Asked Questions are provided courtesy of The Edward Orton Jr. Ceramic Foundation with some modification based on our Vent-Sure vent system and experience.



This shows several small kilns hooked up with one Vent-Sure using two Vent-Doublers. (Up to 20 cubic feet can be ventilated with one vent).

DaVinci Bell-Lift Option

Ideal for sculpture, large format work, and production loading

Features & Benefits

Availability: DaVinci X3200-D & T3400-D Kiln Series. Also a special version exists for much larger kilns (TB644754-D).

Application: A common complaint concerning top loading kilns, the larger ones in particular, is that it is difficult to load them. This is especially true for larger pieces, and in a production environment this labor intensive job can become very expensive over time. Moreover, some people simply aren't capable of doing this strenuous and heavy lifting. Front loading kilns are often desired because they seem to be easier to load, however, it is still a strain to put a heavy piece into the back of a front-loading kiln and these kilns are generally more expensive and difficult to move. Shuttle kilns or envelope kilns work well for loading but they are also very expensive. Bell-lift kilns are one good solution for this problem.

How it Works: The Bell-Lift accessory lifts the whole kiln up as a unit exposing the bottom of the kiln for loading from all four sides. The kiln sections and top are held together as one unit with a metal support frame. This unit is lifted up with a ratcheted hand winch mounted on the external frame. (Electric winches are available as an upgrade.) There are manual safety pins that lock the kiln in place when the kiln is fully raised.

Construction: This whole support frame is made from powder-coated heavy duty welded parts that are easily assembled on site so that the system can be easily broken down for inexpensive common carrier shipping. (It is a two to three person job to assemble the kiln. Only simple tools, like wrenches are required).

Dimensions

Height: A 18", 27" or 36" high kiln (interior) will be 105" high, and a 45" high kiln will be 123" high.

General Dimensions: See reverse side.

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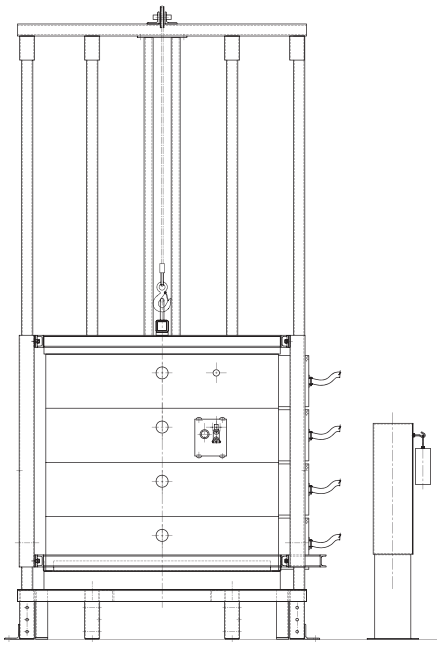
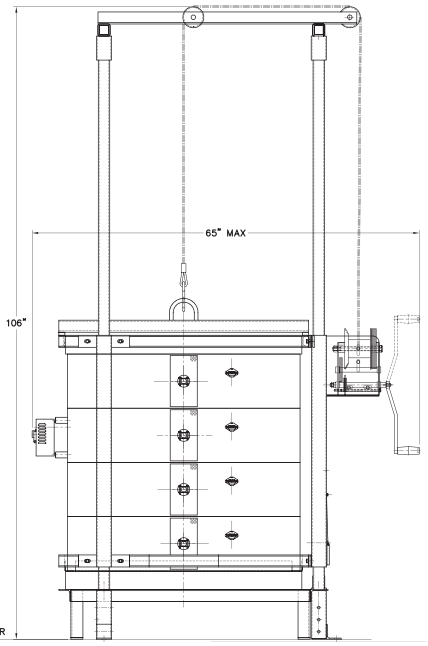
KILNS BUILT TO LAST

Bulletin No: BL-3-15

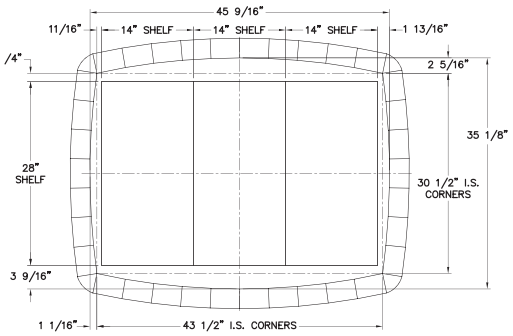
DaVinci Bell-Lift Option

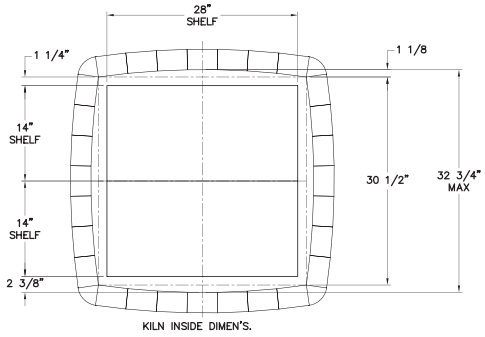


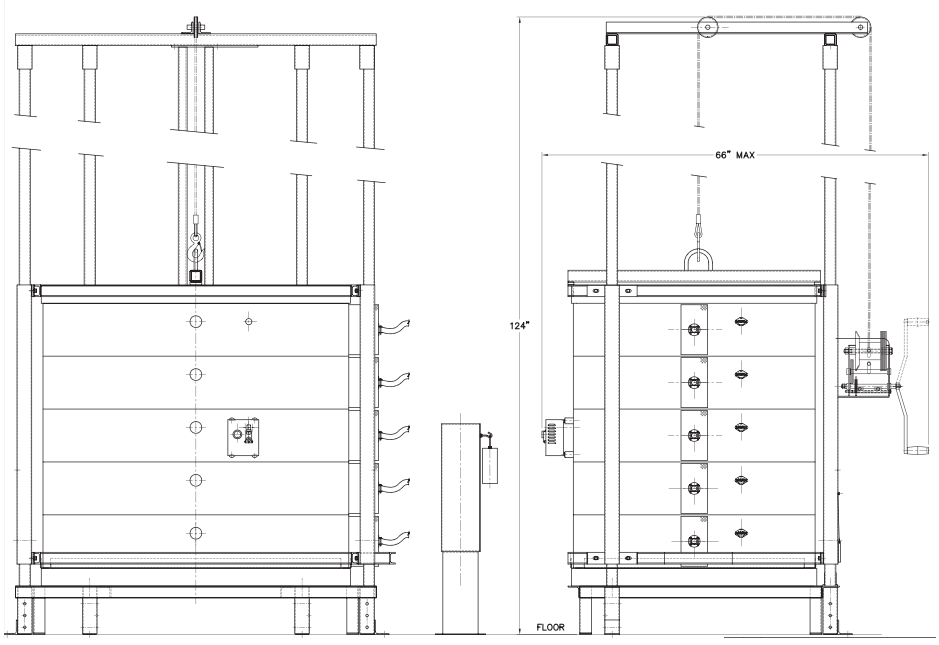


The kiln shown at the top is the X3236-D. The one below is the T3445-D. All the 45" high models have the height of this T3445-D. All the 36", 27" and 18" high models have the height of the X3236-D.

Contact the factory for complete General Dimension drawings.







DaVinci TB644754-D Bell-Lift

100 Cubic Foot Industrial Bell-Lift Kiln

Features & Benefits

Temperature Rating: Cone 10, 2350°F, 1290°C

Loading: The kiln lifts up with an electric winch. Safety latches hold the kiln in place while kiln is loaded.

Assembly: Six 9" high sections stack on top of each other. Frame easily bolts together. **(hotkilns.com/assembly-tb644754)**

Kiln Construction: Unique shallow side arches create super-strong sides and allow for plenty of space for air circulation.

Insulation: 3" K23 firebrick on sides and top. 4" ceramic fiber module top (RCF or Non-RCF depending on maximum temperature required).

Brick Coating: Proprietary reflective brick coating included. This helps firebrick stay strong on the surface and helps prevent dusting.

Patented Hard Ceramic Element Holders: Protect brick from damage, keep elements from falling out of grooves, make changing elements easy, and optimize heat transfer to load.

Elements: Heavy-duty. 3 elements per 9" high section.

Control Panel: Floor mounted NEMA 1 panel separate from kiln. Kiln sections attached to panel with 105ºC cords. Mechanical contactors with control relays. Branch fusing. An On/Off switch and control fuse are included. Direct electrical hook-up to terminal block.

Control: DynaTrol with 4 Easy-Fire programs, 6 Vary-Fire programs, PreHeat, Delay, Program & Segment Review, and Diagnostics.

Zone Control: Three zone.

Peephole Plugs: Non-fragile solid ceramic with heat-locked head. 1" diameter full-view non-tapered. One per section.

Thermocouples: Type K 8 gauge with ceramic protection tubes.

Relays: Mercury free relays.

This kiln is remarkably easy to assembly and install for such a large kiln. (hotkilns.com/assembly-tb644754)

Instructions: Complete instructions with control reference, troubleshooting, and parts list. Web videos show how use the control. There is also a video showing the bell-lift riasing and lowering. **(hotkilns.com/jumbo-bell-kilns-raising)**

Warranty: Limited 3 year warranty. **(hotkilns.com/warranty)**.

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KILNS BUILT TO LAST

Bulletin No: TB64-3-15

DaVinci TB644754-D Bell-Lift

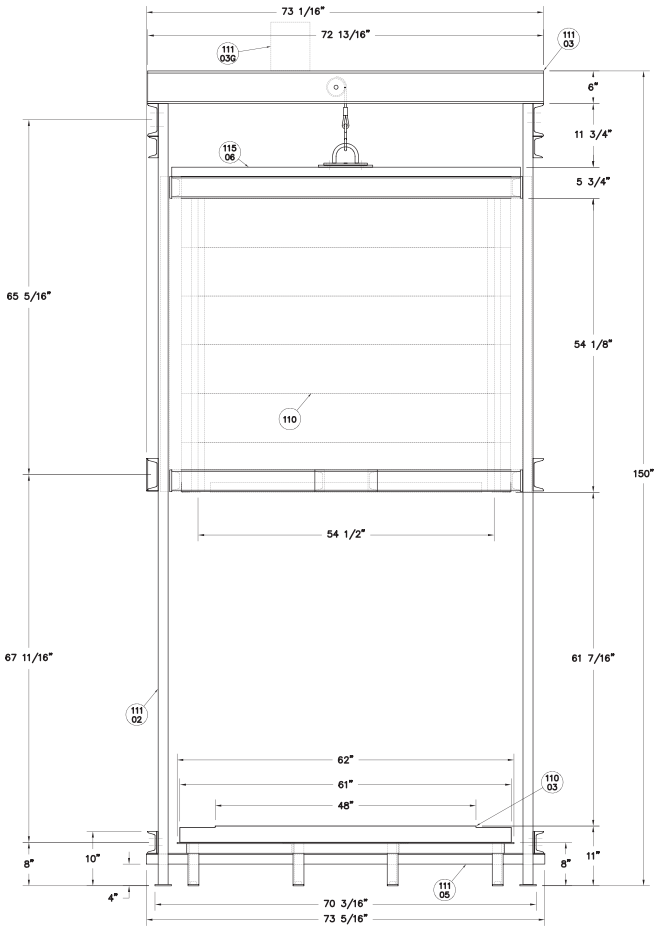
Dimension& Weight Specifications

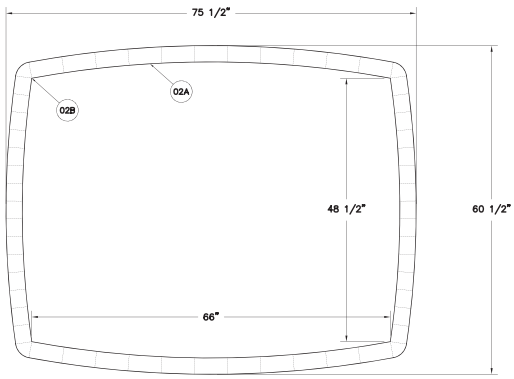
Model Number	Cubic Feet	Inside Dimensions	Outside Dimensions	Shipping Dimensions	Ship Weight Kiln Only
TB644754	100	66” W x 47”D x 54”H	96” W x 74” D x 160” H	Ships on one flatbed trailer	4000 lbs

Minimum Space Requirements: 120” wide by 98” deep by 165” high.

Furniture/Shelves Kit: All special order.

General Dimension Drawings: See **hotkilns.com/general-dimension-drawing-tb644754**





Options

Furniture Kits: Special order.

Vent System: Vent-Sure downdraft vent **(hotkilns.com/vent)**

Thermocouple Options: Type S platinum thermocouples **(hotkilns.com/tcs)** or 1/4” diameter pyrocil metallic sheathed thermocouples. **(hotkilns.com/tc-metallic)**

Industrial Controls: Various industrial-grade controls like the Eurotherm 2604 are available. **(hotkilns.com/eurotherm3)**

High Limit Control: (hotkilns.com/high-limit). With or without Back up contactors.

KISS Software: Monitor and control kiln from your computer. Includes datalogging. **(hotkilns.com/kiss)**

Other Sizes and Configurations: The height can be changed in 9” increments. Other crossections can be designed. A Shuttle-Bell where the kiln moves back and forth between two fixed bases can be designed.

Electrical Specifications

Model Number	Part Number	Volt/ Phase	Watts	Amps	Wire Size	Fuse Size
TB644754-480-3P	K-T-6454/62	480/3P	87,840	106	2/0	150 Amps

UL Listing: Not listed to UL499 standards. CE Listing available

Power connection: Direct connection to a terminal block in the contactor panel.

DynaTrol Dynamic Zone Control

24-Key Control: 4 Preset Ceramic Programs & 6 User Defined Programs

Features & Benefits

Four "Easy-Fire" Preset Firing Profiles: Make it easy to fire ceramics with Slow Bisque, Fast Bisque, Slow Glaze and Fast Glaze. All have time proven profiles for the vast majority of ceramic firing. Just enter cone number and optional delay time, soaktime, candling time and alarm. A cool-down segment can be added to an Easy-Fire program.

Six User-Defined "Vary-Fire" Profiles: This allows you to have 6 separate repeatable stored programs with up to 8 segments (cooling or heating ramps, temperature setpoint and an optional hold time per segment).The DynaTrol allows you to soak at a low temperature for a long time (i.e. you can have an automatic drying period) and then automatically ramp up to your high fire at different rates. You can ramp slowly through critical periods or soak at end point temperatures for more consistent maturing of work. It also allows for a controlled cool-down to avoid heat shock. You can link two of these profiles to make one 16 segment program.

Number of Zones is Programmable: You can easily change the control from a three zone to a two or even single zone control.This is useful on L&L's unique sectional kilns where you can remove or add sections.

Delay Start by up to 99 hours, 99 minutes: Allows you to plan end of firing conveniently.

Candle (low temp soak) for up to 99 hours, 99 minutes: To dry ware.

Soak at Final Set Point for up to 99 hours, 99 minutes: Soaking can dramatically improve firing results.

Thermocouple Offset: Allows you to individually bias thermocouples to adjust for thermocouple drift or kiln uniformity adjustments.

Cone Offset: Allows you to match the "Easy-Fire" cone set points to your real firing experience.

Program Review: See the entire program before or while running it.

Segment Review: Lets you review the segment you are on. Also shows you what your current set point is during the program as it is changing.

Audible Temperature Alarm: Can alert you at any point in program.

Change of Program During Firing: Make adjustments as needed.

Last Temperature Reached: Shown at end of Easy-Fire program. Also the final rate of rise is stored for diagnostics.

Thermocouple Burnout Protection: Kiln will shut down automatically if all thermocouples burn out. Kiln continues to fire if one or two thermocouples burn out.

Digital Indication: See temperature in either degrees F or C. You can scroll through all three thermocouple readings to see what each zone is doing. 14 segment display for clear messages.

Electronic Control Matches Pyrometric Cone Performance: This feature adjusts the final temperature reached in an Easy-Fire profile based on the speed of the actual firing. It results in accurate automatic control of heat-work in ceramic firing.

Filtering & Noise Control: Advanced electrical noise filtering.

Diagnostics: A number of diagnostic and troubleshooting systems are built into the control. **(hotkilns.com/error-codes)**

Adjustable Cycle Time: Adjustable from 200 miliseconds to 60 seconds.

Selectable Thermocouple Type: Type K and Type S are selectable.

Monitor DynaTrol from a Computer: KISS Software package, 25 foot cable and RS485/232 converter that plugs into a Windows based computer. Monitor up to 10 kilns. Download profiles, chart/graph actual firing, monitor kiln temperatures all in Windows. (**hotkilns.com/kiss**).

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KILNS BUILT TO LAST

Bulletin No: DT-3-15

Zone Control Advanced Uniformity

Modern Automatic Zone Control Technology Allows Dynamic Adjustment of Electric Kilns to Ensure Uniform Firings.

Zone control in ceramic electric kilns has been around for quite a few years. However, only since zone control became automated within the past few years has it become more popular.

The typical ceramic top-loading electric kiln, based on designs that are now almost a half-century old, has always had a problem with temperature uniformity, especially from top to bottom. Typically the center or the top of the kiln fires the hottest, while the bottom fires colder. This differential can be up to a whole cone or more.

There are a number of techniques that are used to counteract this effect. One of the oldest, used in batch kilns from time immemorial, is to learn the firing characteristics of a kiln and load the kiln accordingly. You can load certain pieces in the cold spots that won't be as affected by the temperature differences or perhaps load heavier pieces in the center that would absorb more heat. This has the obvious disadvantage of constraining the artist or productive output of the kiln. For instance, it would be difficult to uniformly fire 100 coffee mugs with the same glaze in a conventional polygonal electric kiln.

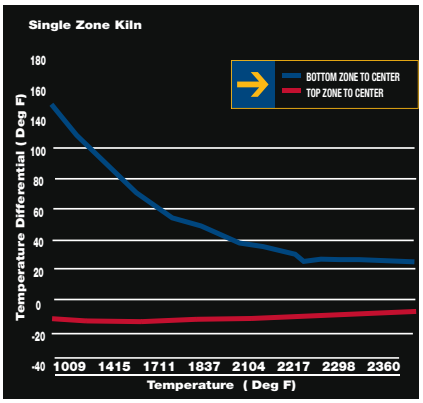
Another technique used in many electric kilns today is to grade the power output of the elements so more power goes towards the top and the bottom of the kiln. This can produce a very even kiln if done right. The problem with this method, however, is that the power output of the elements changes with age and so the heating characteristics of the kiln may become less uniform. It can become a big problem if one element gets ruined by glaze, for instance, and has to be changed. You may have to change all the elements in the kiln. Also this method may not accommodate changes in the loading patterns. (Interestingly when we designed the School-Master kilns, which have graded elements for uniformity, we only had to vary the ohms slightly and then only on the top to achieve perfect results - which indicates that the basic kiln design is extremely uniform.)

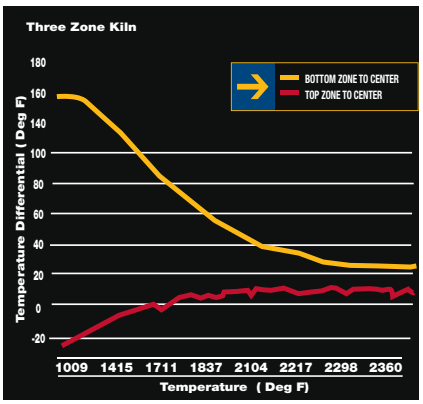
Another method of evening out temperatures in an electric top-loading kiln is to use a downdraft vent. This system pulls a small amount of air down from the top of the kiln and out the bottom. It counteracts the natural tendency of the heat to rise. Our tests have shown about a ½ cone uniformity improvement using this technology.

The other method of dealing with uniformity issues is by using zone control. This is a technology that L&L has used in its industrial division at great expense to achieve critical results for important processes like firing million-dollar loads of ceramic-based superconducting wire (We have built special kilns with up to 24 separate heating zones). In addition, L&L has had a long history of utilizing manual zone control on its top-loading electric pottery kilns. The use of manually controlled infinitely adjustable switches allows control of manual kilns zone by zone. This system, especially when used in conjunction with a multi-thermocouple pyro-meter system, allows potters to see which zone is getting hotter and make adjustments while firing. This, however, can be a tedious process.

In the past few years newer electronic controls designed just for electric kilns have begun to incorporate true automatic multi-zone operation. These controls typically use three separate thermocouple inputs and three relay outputs for the power control. Each zone of the kiln is independently controlled on a separate control loop – sophistication typically only available in controllers costing much more money.

The great advantage of automatic zone control technology is that it allows dynamic adjustment of the kiln to accommodate changing elements and different loads. Typical uniformity is within ½ a cone or better. Another nice feature of zone control is that you can bias zones. For instance, if the top of the kiln fires cooler, you can subtract a few degrees from the top zone thermocouple reading to make that zone fire to a higher temperature.





The downside of zone control is that it can slow down the kiln by turning off power to hotter zones. However, this technology has matured over the past few years. The new controls include the ability to turn zone control off during all but the last segment of the program to speed up firing. The key to good functioning now is to ensure that there is enough power in the kiln to compensate for the effects of the zone control.

Zone control is an excellent technical answer to the age-old difficulty of batch kiln uniformity problems.

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KILNS BUILT TO LAST

Bulletin No: ZC-3-15

One-Touch™ Intuitive Kiln Control

Four-Key Control Redfines Simplicity • Perfect for Schools & Hobbyists

One-Touch™ Intuitive Kiln Control

The One-Touch™ Intuitive Kiln Control was designed for busy school teachers, contemporary studios, and hobbyists. One touch and you are ready to fire the bisque and glaze programs. No programming is necessary, simple adjustments are easy, yet sophisticated programming is possible.

L&L Kilns
hotkilns.com
One-Touch™
Intuitive Kiln Control
Press BISQUE or GLAZE. See bISC or GLA. Press ENTER. See FirE. Press DELAY before you press ENTER if you want to set a delay time. Press ENTER to fire.
Change program settings by pressing BISQUE or GLAZE for 5 seconds until setting type appears. Change each setting with ^ and v buttons. Then press ENTER. Repeat for other settings.
See hotkilns.com/clay-savvy for CUSTOM programming, other options and safety instructions.
ENTER
BISQUE
GLAZE
DELAY
CUSTOM
REVIEW
Manufactured by Bartlett Instruments for L&L Kiln Mfg., Inc. www.hotkilns.com support@hotkilns.com

Simplicity without Compromise

1) ONE-TOUCH

Press one of two buttons marked **BISQUE** and **GLAZE**.

- **You will then see either** bISC **or** GLA
- **Press ENTER and the kiln fires a slow Cone 04 Bisque or a 06 Glaze.**
- **You can add a DELAY time to the program by pressing the DOWN arrow when you see** FIRE **and before you press ENTER**
- **Press the REVIEW button to review the program. You can do this when you see the** FIRE **display or while firing**

2) SIMPLE:

It is easy to change simple parameters to customize your program. When the user presses BISQUE or GLAZE and then holds the button for 5 seconds then a series of options will appear:

- CndL **Candle at a low temperature to dry out the work – expressed in hours and minutes**
- C0nE **Choose the cone that the program fires to**
- HLd **Add a soak time at the end of the firing**
- C00L **Cool the kiln – Fast, Medium or Slow for special effects or thick work**
- HEAT **Speed of firing – Fast, Medium or Slow**
- rStr **Restore the original default settings**
- **The UP and DOWN button will allow adjustment of these values**
- **The internal program ramps are transparent to the user**

3) ADVANCED:

Press CUSTOM and you have four regular Ramp/Soak programs open for custom programming. Each program has eight segments with a ramp, set point and hold for each segment.

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KILNS BUILT TO LAST

Bulletin No: OT-3-15

The Ceramic Process Firing Tips

What happens when you fire clay

LOADING KILN WITH GREENWARE

When placing greenware in a kiln, all pieces may touch each other. To prevent possible distortion, place lids on the pieces they go with when firing to bisque. It is important to place the tallest pieces on the center of the shelf and work outward to the shortest pieces. This will give you the best heat circulation. Be sure the ware is totally dry before firing (unless you use a very long drying cycle). Moisture in the work can cause cracking or even an explosion. We suggest using either the SLOW BISQUE program for heavy loads with a Preheat time of between two to three hours or the FAST BISQUE program for lighter loads (again with a Preheat time of two to three hours). If you want to make up your own program, use the preset program as a guide (see Appendix F in the DynaTrol instructions, **hotkilns.com/dynatrol-700**, for a description of the segments in the preset programs). It is not a bad idea to Preheat the kiln overnight, as its only purpose is to thoroughly dry and start the expansion of the ware, so that the higher heat will not negatively affect it.

VENTING

If you are using the Vent-Sure automatic vent system, you can turn it on and leave it on during the entire firing. If you use an automatic vent, you do not normally need to prop the lid open or remove peephole plugs. If manually venting (without a powered vent), fire in the beginning with all the peepholes out. Then put bottom peephole plugs into peepholes after the low firing is over (you will know it is over when you start to see red heat through the peepholes). You typically want to leave the top peephole out during the entire firing if you do not have an automatic downdraft vent. NOTE: HEAVY GREENWARE MAY TAKE LONGER TO DRY. Be sure to use the Preheat feature in the DynaTrol for ensuring dry work. NOTE: If you have a lot of moisture in your work you may want to prop open the lid for the first hour of preheat even if you have an automatic vent system. (CAUTION: Propping open a lid in this way can cause the lid to crack if you are not careful).

LOADING KILN WITH GLAZE WARE

Robert Shenfeld's studio in Syracuse NY where he produces production quantities of hand-crafted tiles.

When placing ware into the kiln to be glaze-fired, we suggest placing the pieces ½" apart so that when they expand there is no danger of them touching each other. If pieces are placed too close together, they may touch and stick to each other, thereby ruining both pieces of ware.

Except for placing ware the proper distance from each other for good heat circulation, follow the instructions for the firing of greenware. Be certain that no piece while expanding can touch the thermocouples. Use either the FAST GLAZE or SLOW GLAZE program depending on your glaze needs (experiment if you are not sure), or make up your own program. Ask the supplier of your glaze if you use a commercial glaze. There are some good firing recipes in various glaze books such as **Mastering Cone 6 Glazes**. Your clay and glaze supplier will know the cone number to which you should fire your work.

OVERGLAZE FIRING

When firing overglazes such as Gold, Palladium, Mother of Pearl, China Paints, etc., the kiln must be vented during the firing up to 1,100°F. If you are manually venting, leave the peepholes open. (NOTE: This is if you are not using a vent system such as an L&L Vent-Sure which automates the venting process). Check with your clay and glaze supplier for recommended cycles.

SPEED OF FIRING

Although the kiln may be capable of firing relatively fast, this does not mean you should fire it as fast as it is capable of firing. The speed of firing will depend on what you are trying to accomplish. Check with the glaze or clay manufacturer or supplier for a recommended firing cycle.

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The Ceramic Process Firing Tips

SOAKING

Soaking is holding the kiln at any given temperature for a set amount of time. One purpose is to achieve uniform temperatures on the inside and outside of your pieces. Other benefits include the smoothing out of glazed surfaces to get rid of pin holes or craters in the glazed surface. During the bisque firing, people often hold at different temperatures to allow the clay body to out-gas more of its organic material. Holding is also useful at a low temperature like 150°F to 180°F to dry out pottery or kiln wash on shelves.

The downside to holding only happens at high temperatures. There is almost no downside to holding at low temperatures except increased firing time and slight element and thermocouple degradation from the extra firing time. At high temperatures the amount of degradation to the elements and thermocouples is exponentially greater. As a result, holding the kiln at a high temperature will affect the element and thermocouple life.

Try soak times in the range of 5 or 10 minutes at the most. If longer, exercise care as the kiln may over-fire your work. Compensate by reducing the cone's temperature in the cone offset setting, or raise the thermocouple offset. Use witness cones that you can see through your peephole (and be sure to use dark safety glasses when doing so). If you see the cones bending (which would indicate proper heat-work achieved), then you can always turn off the control at that point manually. The Orton website has a great program available for free which helps you calculate how different temperature ramps and hold times will affect the "heat-work" and cone bending in a kiln.

FIRING LOG

Keep a firing log. Keep track of firing times, approximate load weight, firing temperatures and notes on results of the firing. There is a sample log in our instruction manuals (**hotkilns.com/ firing-log**).

APPLYING KILN WASH

Kiln wash the floor of the kiln and the upper sides of the shelves only. Apply the kiln wash to the thickness of a postcard. The purpose of kiln wash is to prevent any glaze that drips from ware from sticking to the floor or shelves. If dripping should occur, remove dripping and cover the spot with new kiln wash. Kiln wash is a powder mixed with water to a light creamy consistency.

For best results, apply three separate coats. If you brush one coat on, let it dry and then brush on another; you can brush off the first in the process, so ideally each coat should be fired on. The shelf can be used while firing the kiln wash, so theoretically you would put one coat on, load the shelves and do your test-firing of the kiln. The second coat would be fired on in the first bisque and the third coat in the second bisque or first glaze (whichever comes next). Fire at least to cone 018—hot enough to give the kiln wash enough adherence to the shelf to prevent it from coming off in the second coating. Note that some people make do without three firings of the kiln wash. However, we include this recommendation as a "best practice".

WHAT HAPPENS WHEN YOU BISQUE AND GLAZE IN YOUR KILN

When you fire a kiln, you chemically and physically alter clay and glaze compounds in a way that, to some degree, can be anticipated and accounted for. There is quite a bit more going on during firing than meets the eye. It is useful to divide the processing cycle into separate distinct stages or segments. The stages that clay and glaze go through in a typical firing can be divided as follows:

COMPLETE DRYING

Even after you room-dry your work there will be some moisture left in the seemingly dry ware. Your ware will pick up moisture from the air, even if it is left for weeks on a warm, dry shelf. Bisque ware can also absorb moisture during glazing, and the newly applied glaze is really a very fine-grained clay coating at this point; it will retain the water it was mixed with and the water in the air until it is completely dry.

When you put this piece in the kiln it will first go through a complete drying stage. This is where any water that was in your ware evaporates and expands to 1,170 times its original volume. This moisture must escape from your ware before the kiln temperature gets to 212°F. It is important that the kiln temperature climb very slowly at first, and that the lid be propped 1" with several soft pieces of firebrick or ceramic posts and the peepholes opened if there is no forced venting system. (CAUTION: Keep in mind that propping open a lid in this way can cause the lid to crack if you are not careful). If you have a lot of moisture in your work you may want to prop open the lid for the first hour of preheat even if you have an automatic vent system. The amount of drying needed depends on factors such as how much mass is in the kiln and how wet the ware is. Factors that lead to a longer drying time include fine-grained clay and thick-walled ware. Be sure to use the Preheat feature in the DynaTrol which automatically sets the kiln temperature at the right drying temperature. Preheating overnight is recommended. It is best to be conservative to prevent the ware from exploding in the kiln. After a while you will get a feel for how long is necessary. Remember to carefully vacuum out your kiln if a piece that is not fully dried explodes.

THE "CERAMIC CHANGE"

This happens to each crystal and mineral particle in the clay body. Even though water between the crystals and minerals has already evaporated (hopefully during the slow preheat time), there is still water in these crystals and minerals that is venting off. This can occur all the way until the kiln reaches red heat. Slow firing is not as critical as there are pathways for the steam to travel through where the water molecules between the particles used to be. Venting, however, is critical to remove the water vapor.

The Ceramic Process Firing Tips

QUARTZ INVERSION

This is a generic name for the 20 or so changes quartz goes through as the temperature increases and the molecules/particles/atoms become increasingly mobile. Most phases that a particle of quartz goes through as the kiln is heating will reverse during cooling. One of the largest and quickest changes the quartz goes through is roughly at 1,060°F with about a 2% increase in the size of the particles during heating. The process is reversed during cooling. Also, during cooling another 2% contraction takes place at about 439°F. This is caused by the formation of "crystobalite" in some clay bodies. There is a lot of other material in your clay besides quartz, so it is not always that important to account for the quartz while the kiln is heating up. The structure of unfired clay is full of pores and non-glass bound particles, so it can withstand the expansion of a few of its quartz particles. Once the clay is fired, though, the particles become part of a solid mass of glass. This mass is extremely intolerant of the expanding quartz particles. This is especially true in the glaze firing (even more so if the bisque was even slightly under-fired). In under-fired ware the quartz never has a chance to react with the fluxes and remains intact during a second firing, ready to expand and contract as your kiln heats and cools. This is one cause of dunting (fine cooling cracks). The glass mass simply has no room for the expanding quartz crystals.

BURNOUT

This is the burning off of any trapped organic matter in the clay. Burnout generally takes place at and above red heat. Sufficient airflow and time are necessary to burn off all the organic matter. If a bisque piece is under-fired, or fired too quickly, any unburned organic matter will bubble up through the glaze during the second firing. Even if the bisque is properly fired, there will still be some organic matter in the clay that will burn out once you pass the bisque's firing temperature. A glaze that fluxes too early will block off the exits for the gasses in the clay body and cause bloating or pitting.

SINTERING

This is the point at which powdered clay particles will begin to form chemical bonds with each other. Although the clay is not melting yet, it is forming a lump from the powdered clay. The point at which this begins to happen is called the 'sintering point'. This, like burnout, happens right around red heat.

DECOMPOSITION

This is where fluxes really start to react and clay and glaze ingredients are deconstructed into their basic building blocks. This process can emit gasses such as sulfur and carbon dioxide which must travel out of the clay body. Once the firing is finished and the kiln cools, reconstruction takes place and the glaze and clay body recompose into a glass.

VITRIFICATION

This is a process that develops in the clay body during firing. At one point a piece of clay might be under-fired and at a higher point it may have good strength, but not good color; at another point it may be perfect and at another, even hotter point, the piece may warp, or melt. What is important to understand is that as the firing progresses, more and more activity is taking place on a molecular level. This is good only to a certain point, after which you are left with a warped blob, or puddle. You want to achieve the "glassification" of the clay. This occurs right before the clay body begins to slump. At this point the molecular bond between fluxes, quartz, silica and other materials makes the "glass". However, it is the formation of the long mullite crystals (which only occurs above 2,000°F) from the decomposing clay crystals that gives the ware its strength.

GLAZE SET, COOL & FREEZE

Unlike the clay body, the glaze melts completely, and the bond between it and the clay becomes more complete as the temperature rises; eventually, the glaze starts to run. Things like fluidity and surface tension are determined first by the chemistry of the glaze, then by the layer formed by the heightened interaction between the glaze and clay molecules. When the ingredients of the clay and glaze have been properly matched, the nature of the molten layer between the two is such that when the kiln is at maximum temperature during firing, things like pinholes and bubbles can rise through this layer and reach the surface from the clay body within, and not remain trapped in the surface when the glaze sets and begins to cool. Once maximum temperature is reached and the kiln begins to cool, the glaze and clay body will follow. The glaze will not solidify until some time after the kiln begins to cool. When this happens depends on the rate of cooling and the chemistry of the glaze. Right before the glaze solidifies, however, crystals can form. Depending on its chemistry, the glaze can solidify quickly and form crystals. Or,

Bill Campbell at work.

"I make a living out of my five L&L kilns. I really beat them up firing them at least three times a week to Cone ten. They take a real beating and keep on going" -Bill Campbell

with some glazes, crystal formation can take place throughout the initial cooling until the glaze finally solidifies several hundred degrees lower than the highest temperature. By adjusting the glaze recipe slightly, one can maximize or minimize the forming of crystals in the glaze during cooling. Once the glaze solidifies it is still important for the kiln to cool slowly. Crazing (fine cracking) can occur if cooling is too rapid. Heat shock, which is usually catastrophic, is something that can happen in the kiln or may occur gradually over time.

In truth, simply test-firing the kiln and the ware to be fired is usually enough to deal with the complexity of the process. Every kiln and kiln-load fires differently, and a new kiln is no exception. The use of a vent system is recommended simply because it will exhaust any detrimental particles and fumes from the kiln, circulate air in the kiln and provide an oxygen-rich atmosphere. See ortonceramics.com for helpful information on how to use cones, firing tips and great information on firing kilns. They have an excellent program available for free which helps you calculate how different temperature ramps and hold times will affect the "heat-work" and cone bending in a kiln.

CUSTOMER-FOCUSED

Four principles have guided our dedicated company team to forge a strong bond with our customers:

- **Design durable products that nonexperts can maintain**
- **Serve customers with creative choices**
- **Provide responsive & experienced support**
- **Continuously innovate**

WHAT L&L CUSTOMERS SAY

BILL CAMPBELL

"I make a living out of my five L&L kilns. I really beat them up, firing them at least three times a week to Cone 10. They take a real beating and keep on going."

DIANE EMERSON

"I switched to L&L because of the deterioration of the element channels in my last kiln. I load larger tiles and I need the extra durability on the face of the firebrick."

FRANK GIORGINI

"My original L&L (J2927) has provided outstanding service and reliability through the firing of countless pots, tiles, udu drums, sculptures and two New York City MTA Subway projects. It's still in service right next to my DaVinci kiln."

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